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NEW YORK AND CHICAGO.



VOLUME LIII., No. 7.
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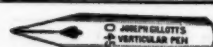
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No. 7

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Sins of Modern Education.

One who would want to make a most interesting investigation ought to interview a number of persons as to the thoughts of their childhood, whether they find that it has been happy or otherwise. The majority would surely give sentimental answers, telling that they always think with tears in their eyes of the beautiful days of childhood; but a good judge of the human heart would justly doubt both the correctness of the answers and the genuineness of the feelings. Partly from repetition of the conventional lie, which always describes childhood as the happy beginning of a history which gradually grows more and more tragic, partly because the heart-aches of childhood are soon forgotten, we are always inclined to regard the first years of our life as a gay, cloudless idyll, while in reality childhood has its tragic sufferings, its despair, its cares, its sorrows, which, though different from those of adults, are none the less strong and keen.

One of the most serious causes of childly suffering is to be found in the education of parents. No matter how kind and loving they are, by reason of their method of education, they are nevertheless often led to causing the child violent and—what is far more important—useless trials.

The first sin of education, as it is commonly managed, is that it is controlled too little by principles and too much by impulses. The child has faults which must be corrected; but all who know something of themselves and of others will admit that ninety per cent. of the fathers and mothers are guided in these corrections more by their momentary impulse of feeling than by calm reflection. If father or mother are in good humor because of some happy event, the child may enjoy a day of greater freedom and is allowed to do anything he likes without fear of reproach, yes, with a feeling of certainty that the parents will laugh at his pranks, or, at most, call him to order in a good-natured way. If, however, father or mother, from any personal reason, are in an excitable state of mind, then a strict government is instituted; the poor child cannot dare to take a step without running the danger of exposing himself to bitter, yes, violent, reproaches and relentless punishment. Even in the best of families education is not governed by any kind of just system, and instead of aiming at the improvement of the children it serves much rather as an outlet of the changing temper of parents, who to-day in

their good humor hug and kiss their child and to-morrow pound their ill-humor out on him.

This fundamental injustice of admonition and correction robs educational means of the greater part of their moral effect and is painfully felt by the child. Let the reader try to recall the first years of his life as clearly as he can and he will remember to have lived in a state of constant inquietude without ever knowing how his parents in reality judged his conduct; compelled to watch anxiously the face of his father or mother to read the state of mind he or she is in at any particular moment in order to arrive at some conclusion as to whether certain doings will be permitted or ruled out; exposed to constant bitter disappointments. How often the child plans, and not sparing any exertion of his imagination, works out some game or a surprise, fully convinced that it will greatly please his parents and be rewarded with their praise; instead of that he is roundly scolded and perhaps also punished because his parents just happen to be cross! These are the little disappointments and bitter-nesses in child-life, but they are—momentarily at least—no less painful to the child than the great disappointments to the adult, for the whole life of the child is limited to the little world within the family, where to-day it finds the good, to-morrow the evil.

But the whimsicality of education also greatly increases the difficulty of the formation of a clear understanding of his duties in the youthful mind, and—what is still worse—it stimulates in the child a sort of pessimism, an embryonic persecution-mania because he regards himself finally as the victim of people who are physically and intellectually his superiors and who simply employ their power to vex and torture him without cause. This state of mind is much more common in children than is generally believed; one who wishes to convince himself of this fact ought to listen to the conversations of children among themselves when dissatisfied with the treatment accorded to them, or to catch the remarks that escape them when they weep and lament over a punishment they have suffered. The thought of the groundlessness of the ill-treatment often enough embitters the hot tears and sobs.

Another sin of which educators are guilty is that they, without being conscious of it, cause the children pain by not taking them serious enough in certain matters and again too serious in certain other ones. The child mind constantly produces the strangest wishes and phantastic desires which adults, often in the presence of the children, laugh at without recalling that they themselves also were not born as complete men and women. Yet this frivolous scoffing of adults wounds the child heart deeply and he feels humiliated and intimidated thereby. The child, too, has ambitions. And as he lives in a period of lively intellectual development during which he produces ideas only with much labor, raises doubts, and puts questions, he is excited and inspired by everything

he thinks and does; he loses confidence in himself when he finds that the fruit of his reflection and laborious mental work is received with laughter by those who stand on a higher intellectual plane. I shall never forget the expression of painful shame which I once saw on the face of an eight year-old boy who had for the first time written a letter to his relatives and given it to his father to look over. The letter was full of mistakes, full of naive turns and errors which threw the father into a fit of laughter. But the poor boy, who had spent much care and labor on the letter, at last could not stand the torture any longer; he tore the letter from his father's hands and ran into another room where he hid himself and cried bitterly. True, not all children are as easily excited as this boy; but all have a more or less developed ambition, and when this is injured they suffer unspeakable pains. And what educational advantage is gained thereby? Absolutely none, not a scintilla of one.

As regards the many strange wishes and whims which occupy the child mind uninterruptedly it is still worse. In order to be just to parents we must admit that the fight against the childly whims is one of the most difficult and laborious parts of their serious duties, but goes without question that many of these so-called whims should meet with more indulgence than is usually the case, providing, of course, that they are not harmful to the child himself nor dangerous to others. We call the child capricious because his wishes are not within the already established limits of our monotonous rhythm flowing habits, because he wants to take a walk, eat, play, sleep in the hours which, according to the time-division made by life-habits, ought to be devoted to other occupations. Besides, the wishes of the child though volatile are intense and would like to be realized at once because the child lives wholly in the present; giving himself up to the moment is part of his nature. If parents are so situated as to be able to do it, would be advisable—especially when the child is between four and eight years of age—not too forcibly to oppose this irregularity of wishes and, up to a certain point, also not their impetuosity. The elasticity of desire which we call caprice, which, however, in reality is caprice only to us, is a deep, organic need of the child who cannot yet adapt himself to the altogether too systematic order of our activity, whose mind and whose organism are not yet as are ours, a carefully-regulated clockwork whose every wheel turns at a certain time in order to accomplish a precisely determined movement. Some day the child will certainly adjust himself to the monotonous rhythm of social life; but my observations induce me to believe that the labor of adjustment is not necessary and should not be required before the ninth or tenth years, and that it is absolutely unnecessary to do violence to the body and soul of a child of six or seven by forcing our systematic manner of life upon him; for this coercion is to the child not only painful *in* and *per se*, it may also have serious consequences.

Impulsiveness begins to disappear at a later time, at the age from twelve to thirteen, more in consequence of a natural change of character than by the influence of objective education; but before this time it is nothing more nor less than a normal peculiarity of the child mind for which we ought to have some regard at least. If the sensations of the child are transient what reason is there for delaying the granting of rational wishes so long till they have weakened or been entirely extin-

guished, when we may just as well fulfill them at once? And yet many will remember at least one occasion in their childhood when they had a fervent wish for reasonable, permitted, yes, useful things, and still on account of inconsistencies and delays it was not granted till the wish had completely died out.

To be sure indulgence of so-called whims and the impulsiveness of children must not go beyond certain limits which, however, cannot possibly be determined by general principles. Hence a model father and model mother should by constant reflection and according to various experiences determine for each individual case where to draw the line. Instead of this, something else happens usually. The "capriciousness" and impulsiveness of the child finally produce in many parents, even in the most loving ones, a state of indefinite excitability which unconsciously prompts them to oppose the wish of the child. In many families there is a sort of bitter struggle between parents and children, which does not at all exclude mutual love, which, however, transforms the mutual will-inclinations into two like poles which repel each another. If the boy wants to eat, he is told immediately that it is too early or too late, and that he must wait. If he wants to take a walk it is said that the weather is too disagreeable or too cool, that he had better stay at home. Frequently there follows in the mind of the father upon the first opposition a feeling of remorse and in consequence he grants the wish; but, as a general rule, whenever a child utters a wish in a somewhat lively manner or somewhat unexpectedly, no matter how reasonable and just it is, the first reaction in the fatherly or motherly heart is refusal. This malicious tendency is most frequently met with in nervous persons who at present, unfortunately, form so large a part of the intelligent classes in civilized nations, and at bottom it is nothing but an excitability produced by physical and moral disturbances caused by the whims of children. In consequence of this excitability the mind is gradually evil disposed and controlled by an indefinite and half-unconscious instigation to thwart the child. But it is certain that this latent malevolence is a source of pain for the child, whether the first refusal is followed by a remorseful concession or whether the father stands by his refusal owing to a feeling of ambition and pride which prevents him from contradicting himself before his child—a feeling, which, though absurd and childish, nevertheless is a weakness of very many men and which is frequently the cause of quarrels in families, also of those which are observed between mature, rational men and little children who are hardly able to walk. In the former case, the child suffers the pain of refusal and grows more timid in the utterance of his wishes, also of those which are permitted and justified; in the latter case, he suffers not only the pain of refusal which the non-fulfilment of his wishes causes him, but he is drawn still deeper into that embryonic persecution-mania of which I have already spoken and which is the true form of the melancholy in children.

On the other hand we take children too serious when we want to compel them to observe all the complicated formalities of social intercourse. It may be said that three-fourths of the education which children receive of their parents consists in initiation in the forms of intercourse. Why is this done? Why is the greater part of the time wasted in teaching children when and where to take off their hats, how to behave

under given circumstances or in the presence of certain persons, how to eat, how to walk? Why are the children tormented with the inculcation of social etiquette and ceremony? All these things ought to be known, sure enough, but the learning of them costs much labor at the age before the eighth or ninth year, while at a later period they are acquired with the greatest ease. All these rules, though universally useful, still are without any great significance, for the external forms have no organic connection of any sort with the sentiments which they are to express. What is the reason, for instance, that the lifting of the hat signifies respect of persons? Hence, since these actions have no rational basis by which the child might account for their significance, he can learn them only by much practice. And this practice is all the more difficult at the age when the mind is restless and distracted and the will less concentrated and less master of itself. The child frequently forgets and violates some form of this complicated and burdensome ceremonial because his attention is turned from it by his want of movement, his curiosity, his play impulse. And in a case of this kind his parents pour reproach over him as if he had done some grievous wrong. But why are parents not satisfied to let the child so conduct himself that he does not bother adults; and why do they not limit the observation of forms of etiquette to a minimum? Why will they force the tender limbs and undeveloped mind of the youthful creature into the fetters of the ceremonial which we adults even find sometimes too severe and too burdensome? What difference does it make that the boy moves about frank and free, without the observation of conventional forms, as long as he is healthy and cheerful and grows strong and vigorous in body and mind?

Thus the cardinal sin of education, as it is conducted at present, is that we look upon the child from the standpoint of an adult and treat him accordingly, that we force our ideas and feelings upon him, instead of being governed in education by his psychology. The consequence of this error is that our method of education is permeated with a certain unconscious harshness, cruelty, and brutality which a future generation of refined sensibilities will regard as an abomination. We inflict great suffering upon the child without wanting to do it, because we are not able to form a clear and precise idea of the state of his mind, of his wants, his thoughts and feelings, because we are not able to enter into his innermost heart and to look at things through his eyes.

Happily the child has an effective remedy for the pains that we are constantly causing him, in the volatility of his feelings. He suffers intensely for a moment and right after forgets again by returning to the laughing and cheerful thoughtlessness which is his normal state. But, nevertheless, as nothing is lost in life and nothing disappears without leaving some traces behind, so also these passing pains exercise some influence upon the organism and the psyche of the child. For this reason we must seek to reduce them to the smallest possible number and degree and strive to make the life of the child a cheerful and joyous one, because in after life they may have cares and troubles and pains without number. Why strew thorns upon the path of the child? To be sure it is not said that everything should be at once forgiven, but parents and teachers must also not punish everything that does not absolutely deserve pun-

ishment. Above all, fathers and mothers must strive to comprehend their child. It is not sufficient to feed the child, protect him against disease and danger, and love him blindly; the supreme duty of fatherhood and motherhood is to learn to understand, to comprehend the child. If this duty is conscientiously performed it will not be difficult to learn also the most essential element of a good education—prudent and rational indulgency.

DR. GUGLIELMO FERRERO.

Turin, Italy.

Scientific Rearing of Infants.

By JOHN ELFRETH WATKINS, JR.

Two of Washington's well-known scientists are rearing their babies according to unique scientific methods, to the like of which probably no children in the world have ever been subjected. The savants in question are Psycho-physicist Elmer E. Gates, director of the new laboratory of psychology and mind art, and Mr. William Dinwiddie, the government's ethno-photographer. Hearing of the experiments in an incidental way, the writer recently visited the two gentlemen at their laboratories and persuaded them to divulge the details of their methods, which have never before been made public.

Prof. Gates is an experimenter in the new science of psycho-physics and is arranging in the suburbs of this city an elaborate laboratory in which he is installing many a complicated apparatus for measuring and altering the sensations and emotions of man. His only child, to whom the writer was presented, is a happy-faced and pretty boy of sixteen months, whose blue eyes shine brighter than those of most children and whose well-formed head, enwreathed in golden curls, is unusually developed for an infant of his size. The unique course of training which he has daily undergone since he appeared in this world has been systematically devised to serve in substitution for the usual processes of amusement contrived for other children of his station. His playthings are the delicate instruments of his father's laboratory, and he enjoys as much fun with this odd apparatus as the average youngster acquires from his dolls or his hobby horse.

Baby Gates' father told the writer, in the beginning of the interview, which took place partly at his laboratory and partly at his adjacent residence, that his original theories relating to scientific child rearing have been based upon numerous experiments which he has for a number of years made with animals, such as dogs, guinea pigs, mice, and others. These animals have had their brains trained by different processes which he applies to man, now that he has seen their exact effects. A man who can't train a dumb beast, this experimenter said, is unfit to train a young infant. It is very dangerous, in his opinion, to subject children to any experimental processes whose exact effects have not first been accurately determined by scientific investigation.

Baby Gates' training, according to the father, began about two years before he was born. In the psychologist's opinion, the mental, moral, and physical developments of a child are profoundly modified by the intellectual and emotional life as well as by the health of both parents during a period preceding its creation. He says that some modern biologists believe that characters acquired by parents during their own lives cannot be transmitted directly to their children. To contradict this he lately trained guinea pigs for four successive generations in the use of their seeing faculties, and he found that the young of the fourth generation were born with a much greater number of cells in the seeing areas of their brains than were found in the brains of other guinea pigs which he had not trained.

The complicated processes by which the Gates baby is trained are based upon an original classification of the senses, which the psychologist has devised after

studying all of the classes of nerves. According to this we have eight senses instead of five, as was taught to us in school. These senses are sight, hearing, smell, taste, touch, sense of cold, sense of heat, and the muscular sense.

Soon after his baby was born the psychologist began, as the first training, to develop the brain cells controlling his senses of heat and cold. Each day he was placed into a tub of water, whose temperature could be varied to any degree. At first a single bath was given in water having the normal temperature of his body. At the end of six weeks two additional baths were administered, one slightly warmer and the other slightly cooler. The baby was placed first in the cool, then in the normal, and last in the warm water. The limits of the temperatures of the cool and warm water were more exaggerated from week to week by adding more baths, and thus has the infant been trained to endure considerably high and low temperatures by gradual and never sudden changes. A device for developing the acuteness of the child's heat and cold senses is a pair of rubber gloves, connected with both a warm and cold water supply. These are daily rubbed over the entire surface of his little body, while the water inside is made gradually warmer or cooler. As a result of this, the psychologist explained, the baby will be able to endure great differences of temperature, and his brain will be stored with memories of all the degrees of heat and cold which any one is likely to encounter in the course of life.

At equally regular intervals Baby Gates is made happy by being placed in front of an electric wheel, which revolves pasteboard disks bearing each of the fundamental colors of the solar spectrum. By combining disks any possible variation of color may be shown, with their various tints, shades, hues, lusters, and transparencies. These are produced in the order of the spectrum. The baby watches the wheel closely, and when he is older he will be taught to discriminate between an increasing number of variations. Prof. Gates told the writer that the average artist has not seen more than ten or twelve per cent. of these possible variations, and is, therefore, lacking in memory structures corresponding with all of the variations not seen. He lately examined a well-known artist and found that he could distinguish less than fifteen per cent. of the combinations shown him. Another instrument to be used on the child when he is older is a case containing three large prisms, so arranged that any variation of the spectrum thrown by one can be covered by any part of the spectrum thrown upon the same screen by either or both of the others. Any desired combination of colors may thus be purely made with the original light. By other instruments the effects of colors upon emotions can be measured. Such training, the psychologist believes, is the best possible foundation for an artistic education.

Just as his eyes must regularly perceive every variation of color, in natural sequence, this child must as systematically hear every possible degree of sound. As a beginning, he is being trained with two little whistles, each having a rubber bulb at one end and arranged to give any pitch in the musical scale. In the beginning the professor held, in each hand, a whistle, one arranged to give a much lower note than the other. A piece of candy was always placed in the hand holding the whistle of lower pitch. Although the whistles were changed from hand to hand, the child soon learned to associate the lower note with something good to eat, and thus to distinguish between the two pitches. By gradually altering the pitches so as to give sounds more nearly the same, greater acuteness in this discrimination is being developed. When further developed the child will be trained by means of a large electrical instrument, which its inventor, Prof. Gates, says will give all possible variations of sound in systematic order. Two electro-magnets are arranged on either side of a small steel disk, about the size of a three-cent piece. By means of two commutators the current may be alternated between

the magnets at any desired velocity. With each alternation the disk vibrates once. When vibrating less than eighteen times a second it creates no audible tone, merely a series of tappings. The faster it vibrates, the higher is the tone, the treble limit being 200,000 vibrations per second. By inserting different disks and pulling out certain slides all of the possible tone-qualities, chords, or harmonics of each tone can be mathematically produced. Most exact lessons in discrimination between audible variations of tone, will be taught with this. In similar manner the sense memories, as the psychologist terms them, of smell and taste, are enregistered in the brain of Baby Gates. There are in the laboratory 1,500 different smells bottled in small vials, classified and arranged in order. Starting at one end of the row and smelling in order gradual differences can scarcely be appreciated until the two end bottles are held to the nostrils. Practice on this piano of smell will build up what the professor calls the necessary "smell memories" in the baby and will teach him great acuteness in discriminating odor from odor. The same vials are used for training the taste memories, the harmful substances being omitted. A straw is dipped into the substance and then touched to the tongue. Taste and smell training was begun upon Baby Gates when he was ten months old, and now he can distinguish about fifty different tastes and thirty different smells.

The development of touch is accomplished by requiring the child to feel all sorts of surfaces, and, according to the father, to allow his mind to live in his skin, for the time being. He is permitted to go barefooted a certain number of hours each day and to touch, both with hands and feet, various substances and materials, such as sandpaper, velvet, brushes, leaves, grass, earth, glazed surfaces, sticky surfaces, etc.

That all of the brain cells governing his muscular sense will be fully developed, this same baby must have every one of the many muscles of his tender body moved systematically and at regular intervals. During this exercise the father keeps before him a manikin showing the position and direction of each muscle. At first the infantile limbs, head and body were moved in different directions by the father's hands until the memories of the muscular feelings were mentally enregistered. Now the little fellow is required to stand on the floor and to pick up toys and other objects from various attitudes, which exercise serves as a mild form of gymnastics. No single muscle in the child's entire muscular system is neglected by this action, contrived to combine mental memories of motion, speed, and direction in his brain.

When he is satisfied that the fundamental training is sufficient Prof. Gates will adopt for his child elaborate courses of athletics and manual skill. All of this odd training is combined with play, and is as thoroughly enjoyed as the ordinary romps of children.

The Dinwiddie children, who are being reared according to another novel scientific system of mental, moral, and physical culture, are a girl and boy, at the respective ages of three and one-half and two and one-half years. Both of these tots have unusually bright and sweet faces and their physical developments are very far above the normal for the healthy, active child. Both of these little ones have been trained, from birth, according to a strictly uniform system. When they were about three weeks old they were placed in darkened rooms and given elementary training in activity by being attracted by lighted lamps and candles moved across their fields of vision. At first each infant merely followed the light with his eyes, not long after he learned to move his head, and later turn on his stomach in order to follow the glitter still further. At three weeks of age both children were taught to grasp at attractive toys. In this way the activities of the hands and arms were developed in a short while. Balls of different colors were also shown to the infants, and they soon learned enough color discrimination to grab for the most conspicuous of the group. At a remarkably early age the father commenced a system of physical culture. Before the movements could be made automatically

each tiny limb was grasped and worked in all possible, natural directions. By tempting him with colored toys each child was soon taught to raise himself from a reclining posture. All sorts of gymnastics were indulged in, at first artificially, and all of the muscles of the body were daily made active by this system. When first placed in a sitting posture the babies, of course, toppled over, but the father or mother was always near, so that when the toppling occurred the only discomfiture was a painless bump of the head against one of the parental hands. Even this was objectionable to the infantile disposition. Soon it was learned that by sitting upright there would be no such bumps, and one of the primary laws of self-preservation was learned. Stronger and stronger efforts to sit erect, unsupported, were soon successful. As soon as crawling was accomplished—and it was mastered at an extraordinarily early age each infant was placed in the center of a large table. The first instinct was to creep to the edge and drop off. The parental arms always managed to catch the daring little fellow before he could strike the floor. This slight jar was not pleasant, and soon another lesson in self-preservation was learned. Other simple lessons were given, such as the dodging of light blows, the avoidance of hot objects, etc. When about six months old each child was grasped under the arms, jumped on the father's shoulders and gradually taught to assume various harmless attitudes when supported in his arms. When about eight months old they could turn simple somersaults while held in his hands.

Being a great athlete himself, Mr. Dinwiddie was able to gradually devise more and more elaborate acrobatic tricks for the little ones, all of which were controlled entirely by his grasp. Up to the time they were respectively one and two years old he never let them perform these feats independently. Now he can lift them by their ankles or feet, hold them straight in the air, require them to perform all sorts of somersaults, swings, balances, and jumps, above his head or under his arms and legs. Although no professional acrobat could obtain a better fundamental training than this, Mr. Dinwiddie tells the writer that it is to be put to a strictly practical use. The whole system of physical culture will be aimed strictly at muscular co-ordination and self-preservation. It will not be carried into absurd phases, whose results are often seen in the all-physical college man. As a result of this cultivated activity one of the children, who fell down a steep flight of stairs when but a year and a half old, reached the bottom unhurt by catching himself on each step as he continued to roll. The little girl the elder of the two, can now jump from a point sixteen feet high and fall into her father's arms without a sign of fear. This physical culture is enjoyed by both little ones more than their usual games. Both children are taught to ride bicycles and to swim.

Ever since they have been able to notice ordinary objects both of these children have been regularly taken out for walks or drives, during which expeditions every object along the way which might interest them has been named and crudely explained. It has been a regular habit of the father, in the hours directly preceding bedtime, to recite to the little ones interesting stories descriptive of the habits of all familiar animals and of the uses of the different familiar plants. At the table they are taught the names of their food in the natural product. Although no efforts have been made to clog their childish minds with school-book lore, both of the tots can say their letters and their figures. The beauty of their training, as described to the writer by their father, is that they always play at work. The world of nature is made for them an interesting kindergarten and playground combined. Their parents are their playmates rather than their taskmasters, and all discipline and authority is weighed out as the friendly advice of trusted and more experienced companions. Their mental, moral, and physical healths, according to Mr. Dinwiddie, are to be further developed by gradually advancing educational games and amusements until they are each eight years old, which age, in his

opinion, will be sufficiently early for them to begin school and associate with other children not known by the parents.—From the *Boston Evening Transcript*.

The State Normal and High Schools.

By R. HEBER HOLBROOK, Ph.D.

It will be impossible to make the state normal schools of Pennsylvania or of any other state a link between the high schools and colleges in the chain of public educational institutions. The attempt to do this is based, probably, upon a misconception of what a normal school is. Many educators, including too many normal school men, do not comprehend that there is a radical difference between normal and other schools.

All agree that a normal school is a professional school while other schools are entirely academic. But the confusion arises over the significance of the term professional, and it is to be regretted that many normal school men do not themselves get the correct idea of "professional" as opposed to "academic," and are, consequently, largely responsible for the confusion.

The clearest exemplification of this confusion is in the claim too frequently made that the ideal normal school should be purely professional—that is, should do no academic work; that the necessity of doing academic work is a misfortune, incident to their undeveloped state, which misfortune will not have to be suffered when they have attained to their true status.

This mistaken idea of the normal school is deeply seated. It has its origin mainly with college men who would make the ideal normal school co-ordinate with the post-graduate law, medical, and theological schools. Whereas the normal school, from its very nature, cannot be a post-graduate school. It has more the character of special or industrial schools which take their pupils from the high school; or grammar schools, rather, since industrial training is now generally begun in the high schools. But the normal school is more inclusive than this, even; since the model school, now an organic part of all normal schools, includes the first eight years of the public school course. It should not be forgotten that teaching, and a teachers' school, does now, always has, and always will, cover the entire education from primary to post-graduate grades. Educators may forget or ignore this yet it is a fact, which not only will not down, but which with increasing force asserts itself.

An ideal normal school should really receive the most of its pupils from *model schools*. That is, a boy or girl who expects to make teaching a life work in public school, academy, or college should really obtain *all* academic training in the model school and normal school. A graduate from a normal school should stand equal with the graduate from a college, and receive his broader philosophic training in the post-graduate college courses. He should pass from normal school to the *university* courses for independent research and liberal culture.

If this ideal is correct it follows that the normal schools, as they develop to their true type, instead of becoming less academic will be more academic. Then academic work must grow at both ends, till, below, it includes the kindergarten and, above, the full college *general* course of one, two, three, or four years, according to time at which elections are permitted.

But all of this academic work should differ and differ widely from the academic work of schools not normal, in that it should always be entirely *professional*. By this is meant that all the teaching should be *accompanied* by or include, rather, constant discussion of the pedagogy and psychology actually involved. No one will suppose that it is here implied that principles of pedagogy should be discussed with the children in the model schools. But every one should see that these principles should be consciously exemplified and identified in all the methods in the model school and discussed by the teachers of the model school, by the critic teachers of the model school, and by the practice teacher of the

model school, under the direction of the principal or superintendent of the model school. But further, and most important, these principles of pedagogy and psychology and history of education should be discussed by every teacher of every class with the *pupils* in that class in all the academic work above the grammar or eighth year grades. This would make *all* the academic work professional—normal. This is what should characterize all the academic work of a normal school and should constitute the difference between a normal school and a school not normal. If normal school men would get this idea they would be better able to give a rational account of themselves and a more substantial reason for the existence of these schools than many of them are now able to do.

Educators, especially normal school teachers and institute instructors, know too well that teachers, young and old—especially the old—teach as they are taught, not as they are taught to teach.

We know that many graduates of our normal schools teach arithmetic, for instance, as they were taught arithmetic when they learned it in the country school, not as they were taught to teach it in the normal school. This is a true statement however humiliating; apparently discreditable and incredible as it may appear.

"'Tis true 'tis pity, and pity 'tis 'tis true."

But it is according to the laws of growth and therefore inevitable that the method of teaching a given subject *grows* into a pupil's mental constitution while he is learning that subject. It is hardly plastered upon him by the methods work of a normal school or of a pedagogical chair of a college—that is, by purely professional work.

Let us now consider the claim of the public school men that the graduates of the high schools should not be required to take the junior year of the normal school, but be admitted at once to the senior year. It is urged in defence of this demand that the work of the junior normal year is academic work and the same that has already been done in the high schools. To this we reply that the academic work of the junior year is not that which has been done by the high school. It covers the same subjects it is true, but it is different, very different, in that it is *professional*. It includes, in the normal school, constant discussion of the principles of pedagogy and psychology actually and consciously employed by the normal teacher in his teaching of those subjects. The pupil in these subjects is not only learning the subject, but he is learning the teaching of the subject *while* he is learning the subject, and *by means of* this learning of the subject. Surely conscientious and intelligent principals and superintendents can, not only comprehend this difference, but appreciate its transcendent importance. Therefore the junior year is not the equivalent of the corresponding high school work. It is different not only as to quantity but as to quality. It is different as to quantity in that to the purely academic work is added genuine professional work. It is different as to quality in that, as should be expected, the methods of the teacher in a given subject who has to teach the method while teaching the subject will necessarily be better than the method of the teacher who is teaching the subject without any necessity of considering his method.

Again, granting that the work in the common branches by the pupil in the high school has been well done, it must not be forgotten that it was done in years preceding the last high school work and has necessarily, much of it, slipped from the mind of the pupil. It was also done when the mind was comparatively immature, when it was more in the acquisitional stage than in the reflective or expressional. Hence it consisted more of the imitative solution of questions than in the philosophic discussion or adequate expression of the principles involved. Therefore, and no principal or superintendent will probably dissent from this, those pupils would profit, even if they were not intending to teach, from the larger grasp on these subjects which would come from a review of them with maturer minds, intent not only upon the principles in-

involved but upon their manipulation for teaching. Realizing this, why should superintendents not explain it to their graduates and urge them to take the junior normal year and so support the normal schools in their similar recommendation?

I think I express the unanimous opinion of normal school men when I say they would prefer for their junior year the graduates of the high schools, to those who have not completed the high school course.

But, say the public school men, "Why do you admit any below the high school graduate? By maintaining these lower classes, you tempt our pupils to give up their high school work to enter your classes which do the same work."

I think I have shown, with sufficient clearness, in the first place, that we do not do the same work.

In the second place, there is a practical difficulty here—and we must regard the plain facts. Nine-tenths, if not ninety-nine hundredths of the pupils who enter the normal schools come from the country school and therefore, very few come from the high schools. Now the normal schools have for their first duty to train these country school pupils to teach country schools, as well as higher schools.

The money of the state is included to build up especially the country schools. They form the bulk of the demand made upon the normal schools. It would be manifestly unwise, unsafe, and impossible to ignore this demand. But these students from the country schools (no less, and no more, possibly, than the pupils of the high schools) need thorough review and correction of their habits of study. They enjoy, many of them, a great advantage over the high school pupils in that they have taught (?) some, sufficient, at least, to have experienced the practical details of teaching.

Now every teacher of methods in normal schools and institutes knows the difficulty of *thinking* teaching, where one has taught, and the practical impossibility of thinking teaching for one who has not taught. Therefore the advantage and necessity, indeed, of combining with *all* these pupils the study of the *teaching* of the subject with the study of the subject. The great difficulty in the method classes of the senior year is the inability of the pupils to furnish from their own experiences any concrete content for technicalities of the psychology and pedagogy classes; this inability it is, as every normal man knows, which makes pedagogy and psychology wearisome and hateful, since its mastery consists almost entirely in the cramming of meaningless words by a *dead tug* of memory.

But when there is added to this a lamentable ignorance of the subject matter itself, so that the teacher of method in arithmetic, for instance, is repeatedly compelled to suspend the teaching of method in order to teach the subject matter, it can readily be seen, that such teacher (and his pupils, too) regrets that the pupils have not studied the subject matter *professionally* in the *junior year* and they realized the concrete particulars of pedagogy and psychology sufficiently to be able to enjoy the study of methods in the *senior year*.

To meet this difficulty, pupils, who see the point, choose not only from advice, but voluntarily, to review sub-junior work as well as the junior work.

For this reason sub-junior classes are increasing rather than decreasing and normal schools dare not refuse it. It is the natural extension of the academic work downward referred to above as inevitable in the growth of the normal school to its ideal type.

Nor should all this be impatiently interpreted by the teachers of the country schools and the graded schools from which these pupils come as a reflection upon the character of their work. It is not necessarily because the work done by these pupils who come to the normal school is *bad*, but because it is *different*. It is because the work done in a school not normal is *purely academic*, while the work done in the normal school is *professional-academic*.

Not only should a pupil from the public schools entering a normal course not feel humiliated in being required to do this professional-academic work in the

common branches, but a graduate of the best colleges preparing himself to teach should gladly do the same work. He should not be graduated from a normal school without it, no matter in what grade or in what position he is to teach. He needs it more as a superintendent of schools than as an inferior teacher. The great weakness in the education of our country to-day is the practical ignorance of superintendents, professors, college presidents, and especially of professors of pedagogy, of this work.

An eminent professor of psychology in the leading university of America lately remarked to a normal school man, "I wish to heaven I could teach that way. The college men have been blundering along with whatever method God seemed to inspire us, and you normal school men have made us feel we must give these problems some attention."

Could all we normal school men, public school men, college men, realize our position in the same humble spirit, there would be much less of this striving to force boys and girls through one year to a state diploma, authorizing him to teach for life.

But I must not close without repeating what I said at the opening of this article: "The attempt to make the normal school a link between the high school and college in the chain of educational institutions of this country is necessarily unjust and impossible."

The normal school is a *normal* school. It is a school *sui generis*. And as it continues to develop it will differentiate from the purely academic school into a professional-academic and academic-professional school—a *genuine* normal school.

State Normal School, Clarion, Pa.

Canadian Normal Schools.

The following article, by Prof. S. B. Sinclair, of the Provincial normal school, at Ottawa, Canada, appeared in the *Pedagogical Seminary* for June and is here reprinted by permission, with slight additions by the author.

An important condition of the British North American Act of 1867, by which the various provinces were federated into the Dominion of Canada, was that "in and for each province the legislature may exclusively make laws in relation to education." This clause was guarded by certain provisions granting remedial powers to the Dominion government in extreme cases. With slight exception, however, thus far a policy of non-interference has been adopted by the Dominion government, and each province has evolved an educational system after its own liking and different from that obtaining in any other province. The normal school being an outgrowth of the educational system has naturally, in each case, been largely conditioned by the educational requirements of the particular province in which it is situated, and accordingly there is no co-relation between the normal schools of the Dominion as a whole.

Certain common characteristics may be noted.

For a number of years the law in Ontario has been that no teacher be permitted to teach in a kindergarten, public, or high school who has not taken at least four months of professional training, and the minimum time limit is now being increased. In other provinces where professional training is not yet compulsory, strenuous efforts are being made to increase the number of trained teachers. For example, in Nova Scotia a new feature was introduced two years ago by which a normal school diploma qualifies for an advance in the class of license. A teacher holding a scholarship certificate of the first or highest class, but having no normal school diploma, ranks as only a second class teacher, and so uniformly a teacher without normal school diploma ranks one grade lower than the scholarship certificate indicates.

All the Canadian normal schools, with the exception of those in Quebec, are non-sectarian. Each school receives aid from the provincial government and has in connection with it a kindergarten and a model (or practice) school, where the normal school students observe and teach under criticism. Ontario has three classes

of professional training schools, but with this exception all the definite professional training given in Canada is confined to normal schools proper. Ontario and Quebec, the two largest provinces, are so different in their national conditions as to place their respective schools at the opposite poles of the Dominion system. In Quebec six-sevenths of the inhabitants are Roman Catholics, and only one-seventh English. As a result the professional training schools of Quebec are sectarian and bilingual, while those of Ontario are non-sectarian and English. Speaking generally, the watchword of the Quebec system may be said to be individuality, that of the Ontario system unification.

In Quebec it has been considered better (at least until more high schools are established throughout the province) to have the normal school work include not only professional studies, such as the history of education, but also definite courses in literary or academic studies, such as grammar and arithmetic.

These literary subjects are, however, treated from the professional standpoint in such a way as to exert an important influence upon the future treatment of the subject when the student comes to teach it.

ONTARIO.

In the Ontario educational system a distinct line of cleavage is drawn between literary and professional studies. The dual system has been abandoned and the normal school work made almost entirely professional. The literary work has been relegated to the high school and university, and at the entrance to the professional training school, the student is required to present a certificate of having passed a provincial examination upon the literary subjects required for the grade of certificate for which he is a candidate. There are three grades of professional certificates in Ontario, called respectively third, second, and first class, with three corresponding grades of literary certificates, called respectively primary, junior leaving, and senior leaving certificates. The examinations for the latter three have now been merged into those of the provincial university, with a minimum requirement of 50 per cent., so that it may be said that a primary certificate means junior matriculation into Toronto university without foreign languages, a junior certificate means full junior matriculation, and a senior certificate means full senior matriculation, that is, examination at the end of first year at Toronto university.

There are four classes of professional training schools, viz.: 1. kindergarten training schools; 2. county model schools for third class teachers; 3. provincial normal schools for second class; and 4. the school of pedagogy for first class, high school, and collegiate institute.

(1) *Kindergarten*. The full kindergarten training course extends over two years. The first year is taken at local schools. At its termination successful students receive a kindergarten assistant's certificate. There were forty-nine of these certificates granted in 1894. The second years' training, which qualifies for a director's certificate, is taken at the Toronto and Ottawa normal schools, under the supervision of Miss Macintyre and Miss Bolton respectively. There were thirty-six directors' certificates granted in 1894.

(2) *County Model Schools*. There are fifty-nine county model schools. Each school receives an annual grant of \$150 from the county in which it is situated. The length of the term is four months, and the certificate granted is good for three years. Students at entrance must hold primary certificates and be over eighteen years of age. There were 1,750 students in attendance at these schools last year.

County model schools were established in 1877 under the inspection of G. W. Ross, M. P. (now the honorable the minister of education), and the present inspector, J. J. Tilley, Esq.

(3) *Provincial Normal Schools*. There are two provincial normal schools in Ontario, situated at Ontario and Ottawa respectively. The Toronto school was founded 1846, with J. T. Robinson, M. A., as principal. The present principal is T. Kirkland, M. A., appointed 1884.

The Ottawa school was established in 1875 with the present principal, J. A. MacCabe, LL. D., at its head.

Both schools are under the administration of the honorable the minister of education, who is a member of the Ontario government. The annual provincial government grant to each school is about twenty five thousand dollars and the schools are conducted as nearly as practicable along the same lines. The minimum qualification standard required for entrance is a junior leaving certificate, a third class professional certificate, and one year's successful experience as public school teacher. There is also an entrance examination on the science and history of education. The length of the term is five months. At the end of the term successful students are granted second class professional certificates, valid anywhere in the province, and for life. The total attendance at the schools last year was 379, of whom 113 were male and 266 female students.

(4) *The School of Pedagogy.* The school of pedagogy is situated in Toronto. It was established in 1890 under the management of the present principal, J. A. McLellan, LL. D. It receives an annual grant of about \$7,000 from the provincial government. Its administration is the same as that of the normal school. The standard for entrance is senior leaving certificate or a degree in arts. The course extends over a year of eight months. On graduation the student receives a provincial first class professional certificate, valid in any high school or collegiate institute in the province. Last year the attendance was 107, of whom 67 were male and 40 female students. Fifty-six were university graduates. Of the graduates in arts of the University of Toronto in 1895, there are now attending the school of pedagogy three of the six highest honor men in classics, two of the four highest honor men in mathematics, three of the five highest honor men in physics, four of the seven highest honor men in English, and six of the nine highest honor men in moderns.

Some changes are proposed with a view to more thoroughly relating and differentiating these three classes of Ontario schools. It is probable that both the model and normal school terms will be lengthened and the normal school student will not be required to furnish a third class professional certificate at entrance.

QUEBEC.

In the province of Quebec there are three normal schools, one (McGill) being Protestant, and two (Jacques Cartier and Laval) Roman Catholic.

McGill Normal School. The McGill normal school was established by the government of the then united provinces of Upper and Lower Canada, in the year 1857, in the city of Montreal, to provide for the training of teachers for the Protestant schools of Lower Canada. The direction of the school was committed to the superintendent of education, the Hon. P. J. O. Chauveau, and the authorities of McGill college jointly. The first principal of the school was Doctor, now Sir Wm. Dawson. The present principal is S. P. Robins, LL. D. Since confederation the school has been maintained by an annual grant from the legislature of the province of Quebec. It is now under the control of the Protestant committee of the council of public instruction of Quebec, which, however, commits its immediate administration to the superintendent of public instruction and to a committee chosen by the corporation chosen by the McGill university. The school is thus kept closely in touch with and receives valuable assistance from McGill university. The government revenue is increased by a grant of \$3,000 from Montreal Protestant board school commissioners, making a total of about \$17,000 per annum. Sewing, modeling in clay, and cooking are taught, and a workshop is maintained in connection with the school.

The full normal school course extends over two years of nine months each. At the end of the first year, successful students are granted an elementary school diploma, and at the end of the second year, a model school diploma. The majority of the students take the two years' course. The literary qualification demanded

at the end of the two full years' course is almost exactly equivalent to that of matriculation into McGill university, and with a certain specified standard is accepted by that university as matriculation *pro tanto*. The literary qualification demanded for entrance to the normal school may be said to be slightly inferior to that of a student who, with a year's study, could take McGill matriculation. Last year there were 11 male and 156 female students in attendance.

There is also in connection with McGill normal school a short course in pedagogy for what is called the academy diploma. It consists of forty lectures and forty half day's teaching in the practice school. For entrance to this course students must be either university graduates, or under-graduates of two years' standing holding the model school diploma previously described. Last year 10 male and 14 female graduates of McGill university took this course. In 1894 McGill normal school granted 7 academy diplomas, 40 model school, and 48 elementary school diplomas.

Jacques Cartier and Laval Normal Schools. The Jacques Cartier normal school in Montreal and the Laval normal school in Quebec were originated in 1857 for the purpose of training teachers for the Roman Catholic schools. The present principal of the former school, the Rev. H. A. B. Verreau, was appointed in 1857. The first principal of the other school was the Rev. E. Horan, also appointed in 1857. The present principal is Rev. T. G. Roleau, appointed 1888. In common with McGill these schools receive each a government grant of \$15,000 per annum. Laval receives students of both sexes, and Jacques Cartier male students only. In both schools the students are in residence.

"Every candidate at entrance must undergo an examination before the principal as to his sufficient knowledge of reading, writing, the rudiments of grammar in his own language, arithmetic to proportion inclusive, the rudiments of geography, and the shorter catechism." The course of study extends over three years, and is such that students may obtain an elementary diploma at the end of the first year, a model school diploma at the end of the second year, and an academy diploma at the end of the third year. In 1894 the attendance at Laval was 48 male and 61 female students; of these 7 received academy diplomas, 57 model school, and 30 elementary diplomas. The attendance at Jacques Cartier was 55 students, of whom 4 received academy diplomas, 11 model school, and 6 elementary school diplomas.

NOVA SCOTIA.

The provincial normal school of Nova Scotia was opened at Truro in 1855, with Rev. Alexander Forrester, D. D., as principal. He was succeeded in 1869 by the present Principal, John P. Calkin, M. A. The school receives an annual grant of \$8,000 from the provincial government. It is affiliated with the provincial school of agriculture for the purpose of securing to the normal school students, practical instruction in the biological sciences. There is in connection with the normal school a manual training room fitted with model work benches, sets of wood working tools and drawing-boards. The work of the normal school course resembles that in the Ontario schools in that it is almost entirely professional, and that literary examination certificates are demanded at entrance to the normal school. Students are ranked in senior, intermediate, and junior classes, according to their respective literary qualifications. The full course extends over one year of eight and one-half months, but the minimum time of attendance required of students depends on their qualifications on entering the institution and on the rank of diploma for which they are candidates. As a rule candidates for first or highest rank diploma are required to attend the full year of eight and one half months, those for second rank five months, and those for third rank three months, but a shorter period of attendance is granted in special cases. In 1894 the total attendance was 130, of whom 8 were college graduates; 123 diplo-

mas were awarded, of which 53 were of the first rank, 56 of the second rank, and 14 of the third rank.

NEW BRUNSWICK.

The provincial normal school of New Brunswick is situated at Fredericton. It was founded in 1848, with J. Marshall D'Avray, as principal. Eldon Mullin, M. A., is the present principal of the school. The provincial grant in 1894 was \$5,741.69.

The length of the course and the subjects prescribed correspond somewhat closely to those of the Truro school.

In 1894 there were 394 students enrolled, of whom 35 were in the senior division, 258 in the junior division and 27 in the French department. Of these, 68 were granted first-class license certificates, 129 second class, and 117 third class.

PRINCE EDWARD ISLAND.

Teachers in the Province of Prince Edward Island are trained at the Prince of Wales college and provincial normal school, which was established at Charlottetown as a united institution in 1879, under the control of the present principal, Alex. Anderson, LL D.

The annual government grant to the combined institution is about \$5,000. In 1893 there were granted 7 honor diplomas, 7 first-class ordinary diplomas, 4 second-class ordinary diplomas, and 10 third-class diplomas.

MANITOBA.

The Manitoba school system resembles the Ontario system, but is on a less elaborate scale. Third class teachers receive a ten weeks' training at the hands of county inspectors in "local normal schools." Last year 120 teachers received this training. First and second class teachers are trained in the provincial normal school.

The Manitoba provincial normal school was established at Winnipeg in 1882. The first principal was Mr. L. E. Byington. The present principal is Mr. W. A. McIntyre, M. A., appointed in 1892. The school is under the direct control of the provincial government, from which it receives an annual grant of about \$5,000. The term extends over six months. Last year the attendance was 42 male and 52 female students.

NORTHWEST TERRITORIES.

Persons desiring to qualify as teachers in the Northwest territories are required to pass a non-professional examination and undergo training in a normal school. The standards of literary qualification and professional training are similar to those in force in Manitoba and Ontario. Local training schools were established in 1890. By the ordinance of 1892 training was made compulsory.

Persons who have obtained third class non-professional certificates are trained at local centers for ten weeks by the territorial inspectors.

Candidates who hold non professional certificates of the first or second class are trained in the territorial normal school.

This school was established at Regina in 1893, under the direction of Mr. D. J. Goggin, M. A., superintendent of education. The term for each class is four months. The course includes a study of the science, art, and history of education, with practice in teaching under supervision. Permanent certificates are not issued till teachers have received a satisfactory report from an inspector, after having taught one year on an interim certificate.

British Columbia has as yet no normal school, but it is proposed to establish one at an early date.

The study of the educational history of Canada reveals the fact that in each province the proportion of trained teachers has steadily increased, and that there is a growing public sentiment in favor of the ideal that every teacher in every school should have a certain quantum of professional training.

Editorial Notes.

One of these days the people will find out that much of what is done in the school rooms is nothing but sham and a wicked and senseless waste of childhood's time. We have said over and over that *only teachers can teach*; the public goes serenely along, cheating its children with the idea *anybody can teach*. It is time this huge wrong came to an end. *It must end. It shall end.*

All who are silently or actively helping on this wrong are guilty of conspiracy against childhood.

Let the end come of employing unemployed, untaught, untrained, unprepared, unskilful, unthinking, unprogressive, and unsympathetic persons in the school-rooms.

Teachers and teachers only for the schools—for the schools were made for the children.

The educative effect of example is infinitely greater than that of words in moral training. "Not the cry," says a Chinese writer, "but the rising of a wild duck impels the flock to follow him in his upward course."

Particular attention is called to the important article in this number on "Sins of Education." Its author is Professor G. Ferrero, of the University of Turin, the renowned psycho-physicist and co-worker of Prof. Lombroso. Though written with especial reference to parents, the conscience of every educator will attest to the universality of the plea for the sins pointed out in schools as well as homes.

Though it has been repeatedly announced that THE SCHOOL JOURNAL publishes fifty numbers a year and that in the two weeks ending on Saturday last no issues should be expected, a number of readers tell us that they have received no papers on the first and eighth of this month. Their interest in THE JOURNAL is very flattering indeed, but they certainly will not begrudge the editors their brief vacation.

Leading Events of the Week.

AUG. 18.—United States troops have a fight with Yaqui Indians near Tucson, Arizona.—Death in Portland, Me., of Prof. F. Nicholas Crouch, the author of "Kathleen Mavourneen," and many other songs.—Snow falls on Mount Washington.—Emperor Francis Joseph celebrates his sixty-sixth birthday by conferring decorations on several prominent persons.—Members of the Conway expedition accompanied by Dr. Nansen arrive at Hammerfest, Norway. AUG. 19.—It is said that the Canadian government has reached a solution of the Manitoba school question.—A ship that will travel on rollers launched near Paris.—Commencement exercises held at Chautauqua.—Report that a plot was discovered to blow up the castle of the Spanish Infanta Isabella at San Ildefonso. AUG. 20.—Spain threatened with a revolution in the Philippine islands.—Lord Russell in an address at Saratoga, speaks of the important part played by the United States in shaping international law; he advocates arbitration of international disputes.—The revolutionary committee hoist the Greek flag in Crete. AUG. 23.—The White squadron returns to New York after evolutions and target practice at sea.—Hoke Smith, secretary of the interior, resigns from the cabinet and ex-Governor Francis of Missouri, is appointed in his place.—Important changes pending in the German cabinet. AUG. 25.—It is reported that Italy is about to withdraw her legation to Brazil and to send warships thither. The trouble is over an alleged insult to the Italian flag.—Canadian Conservatives elect Sir Mackenzie Bowell leader.—Said Kalid seizes the throne and declares himself sultan of Zanzibar.

Announcements for New York State Teachers.

The following are the dates of the Teachers' institutes in New York state for the months of August and September:

Aug. 31 Ulster County at Ellenville (Mr. Stout, Misses Himes and Eggleston.)
 Sept. 7 " " " Kingston (Messrs. Sanford and McLachan, Misses Himes and Eggleston.)
 Sept. 14 Rensselaer County at Averill Park (Mr. McLachan, Misses Himes and Eggleston.)
 Sept. 21 Wayne county at Wolcott (Mr. Stout and Miss Rice.)
 " 21 " " Newark (Mr. Shane and Miss Rice.)
 " 21 Albany " " Allamont (Messrs. Hendricks and Smith, Misses Himes and Isdell.)
 Sept. 21 Erie county at Tonawanda (Mr. Sanford and Miss Eggleston.)
 " 21 Suffolk county at Northport (Mr. McLachan and Miss Himes.)
 " 28 Delaware county at Walton (Mr. Bugbee and Miss Eggleston.)
 " 28 Putnam " " Carmel (Mr. Sanford and Miss Himes.)
 " 28 Tompkins " " Trumansburg (Mr. McLachan and Miss Rice.)
 " 28 Lewis " " Port Leyden (Mr. Bugbee and Miss Rice.)
 " 28 Columbia " " Philmont (Mr. Stout and Misses Rice and Eggleston.)
 Sept. 28 Monroe County at Fairport (Mr. Hendrick and Miss Eggleston.)

CONDUCTORS AND INSTRUCTORS.

Augustus S. Downing is supervisor of teachers' institutes and training classes.

The institute conductors are: Henry R. Sanford, Pen Yan; Isaac H. Stout, Geneva; Welland Hendrick, Cortland; Archibald C. McLachan, Seneca Falls, and Percy I. Bugbee, Oneonta.

Special instructors in drawing are: Miss Gratia L. Rice, Buffalo and Florence B. Himes, Albany in primary work, Miss Anna K. Eggleston, Buffalo.

Inspectors of teachers training classes, S. Whitford Maxon, Adams' Center; Frank H. Wood, Chatham, and Ellis D. Elwood, Ilion.

Uniform examinations for first grade certificates, Aug. 13-14; second grade, Aug. 13-14, Sept. 26; third grade, Aug. 14, Sept. 25. The dates for examinations for training class certificates are not set. Regents' examinations. Sept. 22-24.

MEETINGS OF EDUCATIONAL ORGANIZATIONS.

Meeting of department of superintendents, February, 1897.
 Fifty-second annual meeting of the State Teachers' Association, July, 1897.

Thirty fifth University Convocation, Albany, 1897.
 Annual meeting of the National Educational Association of the United States, July, 1897.

Fourteenth annual meeting of the State Association of School Commissioners and Superintendents, Niagara Falls.

Holiday Conference of the Associated Academic Principals, Syracuse, December.

Fourth annual meeting of the Association of Grammar School Principals, December.

Practical Enforcement of Truant Law.

BUFFALO, N. Y.—The new truant school will be opened in September. It will be a temporary home for boys who persist in running away. The cost of remodeling the building and fitting it up will be about \$2,000, and the expenses of running it are estimated at \$1,000 or \$6,000. Arrangements are being made to enforce the new law. Every patrolman will carry a book of blank reports, which will be filled out and returns made each day to the superintendent of schools. Each report is to be headed as follows:

DEPARTMENT OF POLICE.

Report of Patrolman . . . in the . . . Precinct.
 Buffalo, N. Y., . . . 189 . . .

The following children, apparently between the ages of eight and sixteen years, have been found wandering about the streets and public places of the city during the school hours of the school day, having no lawful occupation or business and growing up in ignorance, and are reported as proper subjects for investigation by an attendance officer of the department of education.

Each truant officer is required to send a written notice to the parent or guardian of a non-attendant. If the notification be to an employer of child labor it is sent by the superintendent, and warns employer that if he continues to employ a child who has not attended school eighty consecutive days during the present school year, he will subject himself to a fine of \$50.

When the parents or guardians are unable to compel the child to attend school, they must present a certificate to that effect to the superintendent, who will send the boy to the truant school.

A Correction.

We are requested to announce that the *Kindergarten News* has been enlarged and greatly improved and is now offered at \$1.00 a year, instead of the *Kindergarten Magazine* as erroneously stated in THE JOURNAL of August 15. The *Kindergarten News* is published by the Milton Bradley Company, Springfield, Mass.

Training Class for College Graduates.

THE JOURNAL some time ago spoke of the commendable attempt made during the past year in connection with the schools of Brookline, Mass., to train a limited number of college graduates for the work of teaching. It is pleasure to hear that the plan has met with such marked success that Supt. Dutton has decided to continue it the coming year and it may confidently be expected that with the experience already gained the facilities offered for gaining a knowledge both of the science and art of teaching will be ample and efficient.

Those joining the "Brookline Training Class for College Graduates" are expected to give their time for the entire year, beginning September 22, unless some unforeseen necessity arises for doing otherwise. The elements entering into the training are as follows:

1. Observation in all grades of the Brookline schools from the kindergarten through the high school. Special times will be appointed for this purpose.

2. Teaching under the direction of experienced instructors. Special attention will be given to interest, correlation, questioning, and reproduction.

3. Weekly lectures, with collateral reading upon

(a) The History of Education.

(b) Psychology applied to teaching.

(c) Principles of teaching and school management.

(d) Methods of teaching the various branches.

(e) Attendance upon general meetings of teachers and the meetings and public lectures of the Brookline Education society.

4. The preparation of a thesis upon some educational topic.

Among those who are expected to give lectures or instruction during the year are:

Prof. Paul H. Hanus, Harvard university; Miss Sarah L. Arnold, supervisor of schools, Boston; Prof. William T. Sedgwick, Institute of Technology; Mr. John Tetlow, head master of the Girls' high school, Boston; Dr. Walter Channing, Brookline; Miss Laura Fisher, supervisor of kindergarten, Boston; Mr. Daniel S. Sanford, head master of Brookline high school; Mr. John C. Packard, master, Brookline high school; Miss Mary E. Kingsbury, Miss Mary P. Frye, high school; Mr. Ray Green Hulung, head master of English high school, Cambridge; Miss Mary McSkimmon, principal Pierce grammar school, Brookline; Miss Helen P. Howell, Brookline high school.

Superintendents and college graduates desiring further information should address Samuel T. Dutton, superintendent of schools, Brookline; or Miss Amy P. Lothrop, secretary of training class, 37 Commonwealth avenue, Boston.

County Certificates for Pupils.

NEW BRUNSWICK, N. J.—A new feature in the state of New Jersey is the granting of testimonials of scholarship through the county board of examiners to pupils who are unable to remain at school till they are entitled to receive diplomas. The superintendent of this county has adopted third grade subjects as a county standard of successful school work by pupils, and those reaching this standard have received a testimonial of scholarship. That this new movement is appreciated by teachers and pupils is attested by the numbers who attend the examinations. The examination places much extra labor upon the county superintendent and examiners, but it is likely to be continued till the legislature provides a state standard for pupils.

Permits to be Signed by Teachers.

PHILADELPHIA, PA.—A bill is being prepared by State Factory Inspector Campbell which he thinks will aid the enforcement of the compulsory education law. The bill provides that children applying for work must present certificates from their parents stating that they are of the age required by the state, and also certificates from their teachers showing that they have attended school at least the minimum of the time required by law.

Origin of Words.

The word "pamphlet" is derived from the name of that Grecian lady Pamphila, who wrote numerous epitomes of history. The "sandwich" took its name from the earl bearing that title, who introduced that article of food in the time of George III.; "negus" was called after Colonel Negus. Many foreign words were introduced into the language in the same way. The guillotine, as an instrument of execution, was named after its inventor Joseph Ignace Guillotin; galvanism after Dr. Galvani, of Bologna; mesmerism perpetuates the name of Dr. Mesmer. The first form of photography, daguerreotype, was named after its inventor. Louis J. M. Daguerre, the French scene painter; the older method of executing a portrait was called after Etienne Silhouette.

The mackintosh was named after Charles McIntosh, of Glasgow, who discovered a waterproof varnish; macadam as a mode of pavement was called after its inventor, John McAdam; to "bowdlerize," or expurgate a book in editing it, comes from Thomas Bowdler; to "grangerize," or make additions to it of autographs, prints, etc., by way of illustration comes from the Rev. J. Granger who produced it.

The Failure of the English Education Bill.

[SPECIAL CORRESPONDENCE.]

The year 1896 will long be remembered as a year of blighted hopes in the educational history of England. It opened so auspiciously. The long struggling voluntary and poor board schools were to be helped from the starvation depths into which they had gradually fallen and with the advent of the famous education bill the co-ordination of primary and secondary schools seemed to be within the grasp of zealous reformers, together with many other useful improvements. And now, everything is dead again! and none are so bold as to prophecy a resurrection of buried ideals.

Now that the storm of excited passions and partisan cries is hushed it may be interesting to probe the causes of the failure of the strong government to carry its bill. There is no doubt that the measure was a real educational measure, and this was undoubtedly the main cause of its failure. Designed by experts, it was left to politicians, pure and simple, to engineer through the House of Commons; a body in itself ill adapted to calmly discuss the bearings of such a bill; instead of keeping in mind the wholesome tendency of a strong educational unit for each county, the *amour propre* of each borough in each county became the determining factor, and thus it came about that on the very threshold of the consideration of the bill in committee, the leader of the house, Mr. Arthur Balfour, gave away the whole case for the proposed reform, by allowing each borough of more than 20,000 inhabitants to be an independent educational authority for both primary and secondary education. To consider the bill after this lamentable concession was sheer waste of time; for the present able and useful work of the counties in furthering technical education was thereby seriously weakened and future progress rendered impossible. Such small authorities would have but small means at command and the authority itself would be lacking in the necessary importance to command respect for its transactions.

What moved Mr. Balfour to act in this manner, unless in sheer ignorance of the effect which would follow, must remain a mystery for many years to come. It may have proceeded from lukewarmness on the part of a section of the cabinet, which of course is really a coalition of once Liberals with old-fashioned Tories.

Another factor which made for the destruction of the bill was the National Union of Teachers, led by Macnamara and their two representatives in the House of Commons, Mr. Yoxall and Mr. Gray. These led a vigorous crusade against its clauses, especially the formation of the authority and the religious clauses. One result of this opposition is the postponement of a settlement of the teachers' pension question *sine die*.

As to the future, a beginning is promised early in January next, but the proposals then will undoubtedly be narrowed down to the smallest possible compass, and may indeed go no further than the allotment of an extra grant to poor schools. In fact, Mr. Balfour has recently publicly stated that one measure dealing with both elementary and secondary education is an idle dream. Thus it almost seems that the middle class children are doomed to continue to be fed with the off-scourings of education as represented by unqualified teachers, unsanitary rooms and the poorest of apparatus, and all this with the maximum fees that any private adventurer can squeeze out of parents who have no means at hand to test the glowing prospectus placed in their hand.

In the rout following the withdrawal of the educational bill another very useful measure suffered, *viz.*, the teachers' registration bill. Under this bill all teachers were to be registered by a council formed of representatives of the great teaching associations of the kingdom. The test for registration was to be settled by this council and a list annually published, which any one might consult, and so have some safeguard that a qualified teacher was treating with the intellects of the sons and daughters. A long period cannot very well elapse before some such measure is re-introduced, for the evil is too apparent to be allowed to rest.

To sum up, it may be safely said that the education fiasco of 1896 resulted from an ill-digested study of the measure in the cabinet, and bad, very bad, generalship in the House of Commons. May 1897 prove a year of more "sweetness and light."

London, England.

Sight of School Children.

The London school board has employed an expert oculist to examine the eyes of school children, in order to ascertain whether school work is causing "progressive myopia." Dr. Carter, the examining oculist, reports that out of 8,000 children examined less than 40 per cent. have normal vision in both eyes; that 12.5 per cent. had normal vision in the right and subnormal in the left eye; 8.6 per cent. had normal vision in the left eye and subnormal in the right. The per cent. of subnormal vision in both eyes was 39.7. Over 64 per cent. of the children tested had astigmatism. Dr. Carter finds very little progressive myopia, and he thinks that the eyes of pupils are not seriously affected by the conditions of school life. The sight of London children is not cultivated by their environment. They see only the other side of the street, while the country child has an expanse of landscape

before him. His sight is exercised and no doubt if a test of the sight of country children were made it would be found to exceed the normal, as much as that of the city falls below it.



Fritz Schneidig.—I hear you are plucked again.
Karl Pauker.—Yes, that idiot of a Prof. asked me the same questions I slipped up on last year.

Three Well-known Scientists Dead.

Prof. Josiah Dwight Whitney, of Harvard college, died August 21, at Lake Sunahee, N. H., where he was summing. The event was not wholly unexpected, for he was well advanced in his seventy-seventh year, and his health had not been good for some time. The country loses in his death one of the soundest and most thorough geologists of his day, a worthy fellow of the late Prof. Dana, of Yale, and in practical field work probably the superior of all the other scholars in this science. Louis Agassiz wrote of him to the governor of California shortly before his appointment as state geologist: "I have no hesitation in saying that there is only one man in the United States fully qualified for the survey of California, J. D. Whitney."

Mr. Whitney was born in Northampton, Mass., November 23, 1819, and was graduated at Yale, in 1839. After serving as assistant geologist in the survey of New Hampshire, he traveled in Europe for several years, studying chemistry, geology, and mineralogy. In 1847 he was engaged in the geological exploration of the Lake Superior region for the government, and with John W. Foster, his associate, published (in 1849) full reports of his explorations. Then he spent two years in investigating the mining and mineral resources of the states east of the Mississippi, publishing his 'Metallic Wealth of the United States,' in 1854. In 1855, he was appointed state chemist and professor in the Iowa State university, and later made a geological survey of the state. He also surveyed the lead region of the Upper Missouri in connection with the official surveys of Wisconsin and Illinois, printing the results of his explorations in 1862.

He was appointed state geologist of California in 1860, and, until 1874, was engaged upon a topographical, geological, and natural history survey of the state. The work was then discontinued by act of the legislature. His reports on this subject, which are regarded as the standard authority, amounted to more than six volumes. Meanwhile he had been appointed (in 1865) professor of geology at Harvard, and Yale conferred the degree of LL. D. upon him in 1870. He was one of the original members of the National Academy of Sciences, and was a member of many learned societies at home and abroad. He translated Berzelius' 'Use of the Blow-Pipe' wrote 'The Yosemite Guide Book,' and contributed innumerable scientific articles to different periodicals. Mount Whitney, the highest mountain in the United States, was named in his honor. He was an elder brother of Prof. William Dwight Whitney, the famous philologist, who died two years ago.

Another well known geologist who died this month is Prof. A. H. Green, of Oxford.

Alexander Henry Green, M.A., F.G.S., F.R.S., was born on October 10, 1832. In 1855 he was sixth wrangler at Cambridge, and was elected fellow of Caius college the same year. He was appointed in 1861 to a post on the Government Geological Survey of England and Wales and became professor of geology and afterwards professor of geology and mathematics in the Yorkshire college in 1875. In 1888 he became professor of geology in the University of Oxford. He was the author of 'Physical Geology,' 'The Geology of the Yorkshire Coalfield,' and various papers on geological subjects.

The death of Professor Herbert A. Newton, head of the mathematical department of Yale university, is also announced.

Mr. Newton was born at Sherburne, N. Y., in 1830, and began his work at Yale as tutor in 1853. In 1855 he was elected professor of mathematics.

Professor Newton was one of the associate editors of the *American Journal of Science*, a member of the American Academy of Science, and various other learned societies. He is best known by his contributions to that branch of astronomy which treats of shooting stars or meteors. In recognition of his services to science he was elected associate of the Royal Astronomical society of Great Britain, and a Fellow in 1892.

Reports of Meetings and Summer Schools.

Martha's Vineyard Summer Institute.

The number of summer schools has grown rapidly in recent years and they are now scattered all over the country. They are of three classes.

1. Schools of Pedagogy.
2. Schools for Academic Study.
3. Schools of the Arts.

THE MARTHA'S VINEYARD SUMMER INSTITUTE is the oldest, ablest, and most popular of them all. It comprehends all three of the classes named above. It has had during the session just closed, about four hundred pupils in its Art and Academic classes and nearly three hundred in its School of Pedagogy. In the latter the leading instructors include such eminent educators as Dr. John Dewey, of Chicago; Dr. M. G. Brumbaugh, of Philadelphia; Will S. Monroe, of California; A. W. Edson, of the Massachusetts board of education; Mathilde E. Coffin, of Detroit; Supervisor R. C. Metcalf and Lucy Wheelock, of Boston; Clarence E. Meleney, superintendent of schools New York; Henry T. Bailey, of the Massachusetts board of education; Dr. W. A. Mowry, the president of the institute; Dr. Friedrich Zuchtman, of Springfield, and many others.

The Art classes include drawing, painting, and music, while the Academic studies embrace six distinct sciences, four languages, elocution and oratory, English literature, history and civil government, mathematics, microscopy, physical culture, and the Swedish sloyd.

The work has been done this season with eminent success. Forty states and countries have been represented and the greatest enthusiasm prevailed in all departments. The writer of this article has been a constant attendant upon the school for a series of years, and has never before seen so fine a body of teachers together. They have represented colleges, normal schools, academies, technical and high schools as well as the rank and file of the grammar, primary, and ungraded schools of the country. Many superintendents from different parts of the land have been in attendance throughout the course of five weeks.

The classes in elocution and oratory under the faculty of the Emerson college, of Boston, drawing under Henry T. Bailey, and music under Prof. Friedrich Zuchtman have been very large and enthusiastic. Among the other classes unbounded satisfaction has been expressed by the students in methods, French, photography, history and civil government, English literature, nature study, physical culture, and sloyd.

This school has a large and superior equipment, having six buildings of its own, well furnished, including three laboratories facilities for drawing, physical culture, sloyd, and microscopy. It also has a dormitory and café. One hundred and fifty of the instructors and students have taken their meals at the café. Good board, of the best material, well cooked and well served, has been furnished at four dollars a week.

Martha's Vineyard has the greatest number of superior attractions, in respect to climate,—cool days and cool nights,—bathing, boating, cycling, fishing, entertainments, band concerts, rambles by moonlight, etc.

The bathing is simply superb. The water is always warm, the tide varies but about two feet, the beach is a good one with excellent bath houses, and there is no undertow.

Altogether this school bids fair to permanently outstrip all others in the race, both in numbers and popularity. I am informed that the management are planning great things for next year.

CONSTANT READER.

Cottage City, August 15, 1896.

Clark University Summer School.

When the SUMMER SCHOOL at CLARK UNIVERSITY opened on July 13 there were present over one hundred students and this number increased rapidly until the number registered reached 265 at the end of the week. New students entered during the second week, so that the grand total cannot have been far below 300. The morning and evening lectures were attended (during the two weeks the school was in session) by an average of 250 teachers, a grand increase in numbers over any of the previous sessions of one school. I might have said "250 eager and enthusiastic teachers" and thus have given one of the chief characteristics of this remarkable gathering. Among those present were people from every part of the United States and Canada. Thirty-two states were represented, including the Pacific coast states; the South sending large delegations. College and normal school presidents, professors, and superintendents sat side by side with common school teachers and kindergartners.

A characteristic feature of the whole session was that friendly intercourse, that feeling of good fellowship, of unity, that *esprit de corps* which will make the memory of the summer school dear to the hearts of all participants, and which if it could only be awakened in all the teachers would make our profession the most powerful in the land and the work of the school much more influential.

The school was opened by brief but hearty words of greeting by Messrs. Stoddard and Salisbury, trustees of the university, the latter introducing President Hall, who after having welcomed the students at once proceeded *in medias res* by lecturing on "Children's Fears." As a matter of course Dr. Hall's lectures stood on the center of interest. All were anxious to listen to the latest results of child study which one feels tempted to call Dr. Hall's own science. His subjects were "Fear," "Relation of the Child to Animate and Inanimate Nature," "Laughter, Wit, and Humor," "Anger," "Exceptional and Peculiar Children," "Automatisms," "Children's Ideas of Old Age, Disease, and Death," "Dolls," "Imitation and Suggestion," "Children's Foods," "Second Breath," "Adolescence in Relation to Religion and Love," "Music, Rhythm, and Folk Lore," and his closing lecture "General Aims, Methods, and Prospects of Child Study." The lecture on "Froebel and the Kindergarten," was an important one not exactly under the head of child study. Not less interesting was his first evening lecture on "Mysticism, Occultism, and Allied Topics."

The titles in some cases do not give an adequate idea of the content. Towards the end of the session more and more material was crowded into the sixty minutes of the lecture hour; two, even three, lectures were concentrated in one, each of them containing more thought food than many a book. The audience were aroused to the acme of enthusiasm when the lecturer changed into a prophet and opened the outlook into the future, and foretold the great results of genetic psychology for the cause of education and more for the brotherhood of man.

The other lecturers proved hardly less inspiring. Prof. Hodge talked to large audiences on the physiology of the nervous system, outlining the results of the latest researches, both abroad and in Clark university. Dr. Burnham filled the second hour of the morning sessions with interesting lectures on "School Hygiene," especially on the "Hygiene of Instruction," a branch of science which is in its infancy abroad and has hardly been touched upon in this country.

Prof. Sanford gave an account of the latest results of the "New Psychology," especially of the investigations carried on in Clark university. Dr. Lukens in his lectures on "Drawing and Writing" gave a report of very interesting observations of children, and valuable conclusions drawn from the teaching of these branches. He lectured also on "The History of Curricula."

Dr. Chamberlain's very interesting lectures on "Folk Lore" came in the after dinner hour which many students devoted to rest; this accounts for the fact that they were not so well attended as they deserved.

From four to five every afternoon the members assembled for an educational conference under the leadership of Dr. Burnham. With so many teachers from all parts of the country of different environment and training exchanging their experiences, this seminary was naturally very interesting and valuable indeed.

Most of the evening lectures were given by Dr. Hall. Outside of these lectures opportunity was given for laboratory work in biology under Dr. Hodge, and in psychology under Dr. Sanford and Mr. Lindley; so that any member who wanted to make the most of his attendance had a day of ten hours of hard brain work.

Immediate practical results may perhaps be reached first by the work of July 20 which was set aside as kindergarten day. Many representative kindergartners arrived especially for this occasion. Dr. Harris interrupted his summer vacation in the Adirondacks to add his superior wisdom. Dr. Burnham spoke that morning on "Hygiene of the Kindergarten," pointing out the importance of this branch, and urging its introduction as an essential part of the training of the kindergartner. Dr. Hall spoke of "Froebel and the Kindergarten;" in the evening Commissioner Harris treated "The Philosophy of the Kindergarten." It is superfluous to say what an inspiration it was to hear the two leaders of American education, who so well supplement each another, talk on this interesting topic. Perhaps there never has been heard in this country such impartial and just discussion of the kindergarten and its founder. In the afternoon there was a conference; opinions clashed, but they were honest opinions and all criticism was taken in good spirit by the kindergartners. Many suggestions were made which, if they were not accepted, will lead to a close revision of all phases of the kindergarten work, and it will not be surprising if this day may mark an epoch in the development of the kindergarten in America.

[NOTE.—THE JOURNAL has given a fuller account of the addresses and discussions in its issue of August 15.]

It will be seen that the whole field of pedagogical science was covered at this school. Probably nowhere in the world could be found a course which concentrates so thoroughly on pedagogy, psychology, and related subjects.

But this is not sufficient to explain the enthusiasm shown by all participants which found such manifold strong expressions,

especially on the night when the resolutions thanking Dr. Hall and his assistants were adopted.

We must most strongly endorse again that one resolution which calls on the faculty not to discontinue the summer school in the future, as has been threatened. We may doubt in all modesty whether people who have such splendid opportunity to do good have right to let it slip. If the writer may be allowed to give his idea of the secret of the inspiration which these men kindled in their hearers, and which in turn reacted on them—his perhaps might be said: that we were electrified by the spectacle of seeing, so to speak, their mental workshop, of seeing science grow, new truth spring up in the mind of its maker.

The feeling of comfort which surrounded the visiting members with a homelike atmosphere was largely due, to the genial clerk of the university, Mr. Wilson, with his ever ready and patient efforts to make things generally agreeable, and to the gentlemen and ladies of Worcester who took such active interest in the school and its pupils.

Their hospitality culminated in not less than four receptions which opened the doors of some of the most beautiful homes of the town to the members of the school.

The lectures, especially the evening lectures, and those of Dr. Hall were attended by many residents of the city not members of the teaching profession. The local newspapers gave much space to the reports of the lectures,—which by the way were excellent.

Hoboken Academy.

ERNST RICHARDS.

New Library Department.

An important feature of the recent meeting of the National Educational Association was the organization of a library section. Teachers and librarians have been realizing more and more of late the common ground they occupy as public educators. Careful consideration of the matter has shown the need of systematic co-operation between schools and libraries. The matter was finally taken up personally by J. C. Dana, president of the American Library Association, and a correspondence opened with leading educators. Active interest in the matter was awakened and a very strong petition was presented to the executive council of the N. E. A., asking for the admission of such a section into the association. The matter was strongly presented by leading educational and library periodicals. Thus it came about that when the council met, as one of its members remarked, there was "not much

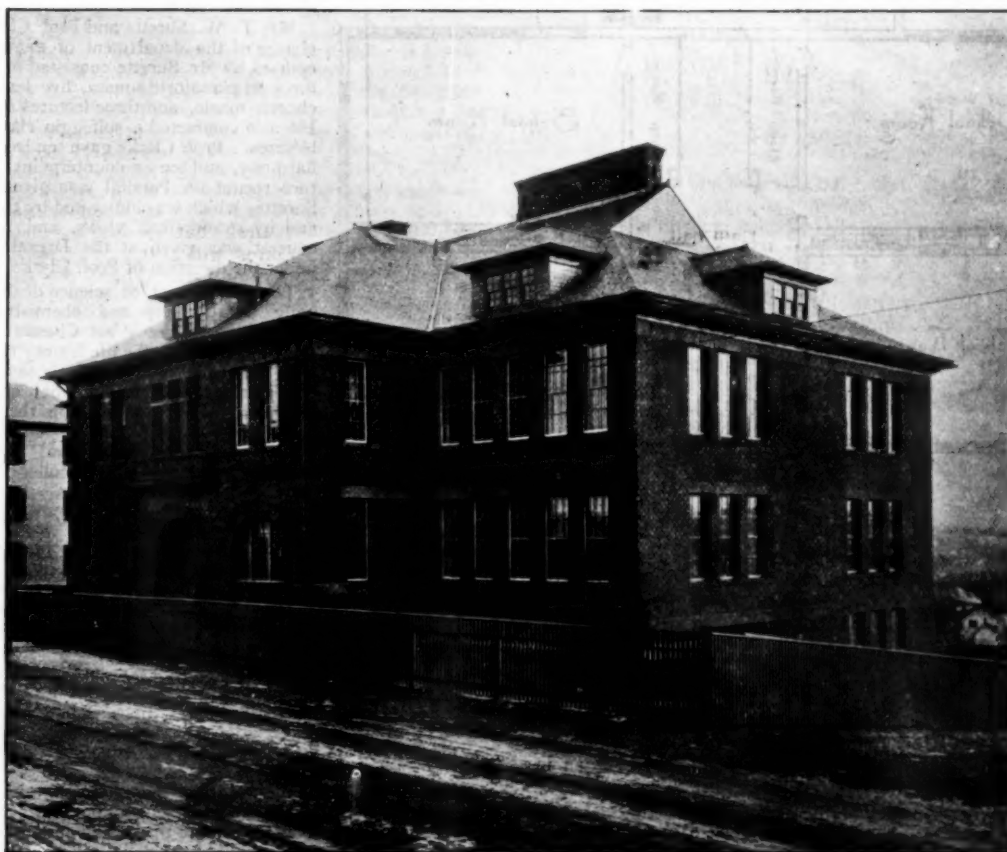
else to do but carry into effect the wishes of so large a constituency." At a meeting of the council on July 6, the matter was presented by Melvil Dewey, state librarian of New York and secretary of the board of regents of the University of New York. The vote to admit the section was unanimous, and to such an extent was it favored that an amendment was adopted to drop the word "school" which was before "library" in the motion and make the new department the library section admitting librarian to membership as well as teachers.

A meeting for organization was held in the Buffalo public library Thursday, July 9, with a large attendance. It was called to order by Wm. H. Smiley, Denver, Col., and Melvil Dewey was appointed chairman and Wm. H. Smiley secretary *pro tem*. Mr. Dewey stated briefly the character and purpose of the departmental organization of the N. E. A.; then a motion was carried to elect a president, vice-president, and secretary, the same to serve as an executive committee to arrange for work the coming year. A full and free discussion, from the point of view of personal experience, followed, of the mutual relationship of a school and library, of librarian and teacher. Dr. Russell, of Colorado; Mr. Bishop, of Illinois; Mr. Skinner, of New York; Mr. Hutchins, of Wisconsin; Mrs. Hull, of Buffalo; Mr. Smiley, of Colorado; Miss Schreiber, of Wisconsin; Mr. Parsons, of New York; Mr. Barbour, of Illinois, and others took part.

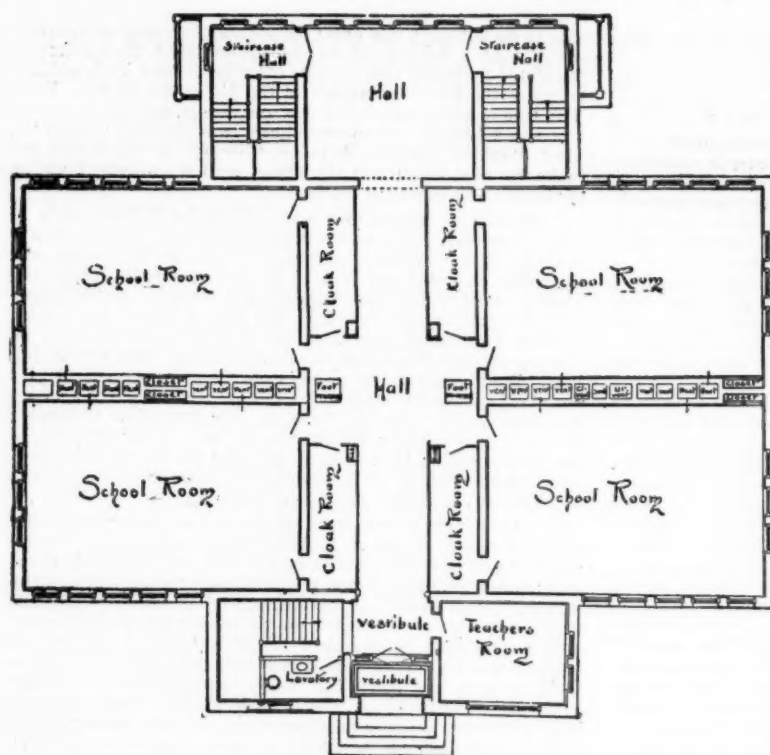
The permanent officers were appointed a committee to confer with the officers of the A. L. A., as to the best means for co-operation between schools and libraries. The time was fully occupied; much enthusiasm was displayed over the formation of the section, and altogether the meeting was full of interest. A committee was appointed to select the permanent officers of the section, and reported for president Mr. Melvil Dewey, secretary of University of New York, well known to both teachers and librarians; vice-president, J. H. Van Sickle, superintendent of schools in district 17, Denver, Col., who has paid much attention in recent years to the use of books in school-rooms, and has latterly established a small circulating library in every school-room district; secretary, Mary Eileen Ahern, Library Bureau, Chicago.

The library section of the N. E. A. is a real fact, has a good start, and bids fair to accomplish the purpose which brought it into existence.

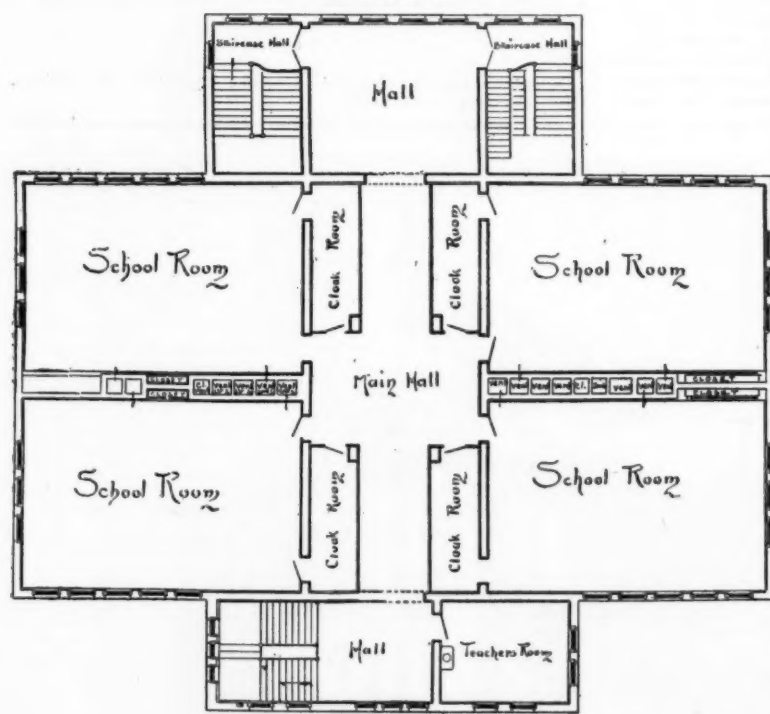
Doubtless you need a good blood purifier or building up medicine. Then take Hood's Sarsaparilla.



UPSALA ST. SCHOOL, WORCESTER, MASS.



PLAN OF UPSALA STREET SCHOOL,
FIRST FLOOR.



PLAN OF UPSALA STREET SCHOOL,
SECOND FLOOR.

University Extension Meeting.

THE SUMMER MEETING OF THE AMERICAN SOCIETY FOR THE EXTENSION OF UNIVERSITY TEACHING was held in the buildings of the University of Pennsylvania, July 6-31. The number of students in attendance on all courses was 237, an increase of twelve over last year.

The five departments of this summer's meeting were (1) Roman Life and Thought, (2) Psychology, (3) Music, (4) Science, Biology and Chemistry, and (5) Mathematics. The department of Roman Life and Thought attracted the greatest number of students, due to the greater variety of subjects treated and the

larger number of lecturers. Professor Shahan, of the Catholic University of Washington, lectured on the relations of the Roman empire and the early Christian Church, and Rev. William Bayard Hale on the transformation of Christianity under Roman influence. Prof. Munroe Smith, of Columbia college, discussed in a series of ten lectures the Roman law in the ancient and modern world, and Prof. Merrill, of Wesleyan university, in two lectures, the Principate. The philosophy of Rome, as represented by Cicero, Seneca, and Marcus Aurelius, was treated by Prof. Hammond, of Cornell university. Prof. Gudeman and Prof. D. C. Munro, of the University of Pennsylvania, lectured on Roman historiographers and Gibbon's "Decline and Fall of the Roman Empire" respectively. Roman poetry was discussed by Prof. C. L. Smith, of Harvard university. Prof. Peck, of Yale university gave five lectures on the private life of the Romans, and Prof. Goodyear showed the debt of the nineteenth century to Rome from the point of view of plastic art. Prof. Lawton discussed the private character of Cicero and Catullus. Single lectures were delivered by Dr. W. H. Kirk, of Vanderbilt university, on Julius Caesar, by Dr. Ernest Riess, on social and religious conditions in the Roman empire from Hadrian to Severus, and Dr. J. W. Tupper, on Virgil in the Middle Ages.

The inaugural address was delivered by Mr. Hilaire Belloc on the Roman basis of our civilization, who also gave a course of five lectures on the French Revolution.

The department of psychology was conducted by Prof. Lightner Witmer, of the University of Pennsylvania, who gave a course of twenty lectures, and, with his assistants, a laboratory course of twenty sessions. Two other laboratory courses of twenty sessions each were given by Prof. Witmer and his assistants in child psychology and the anatomy of the nervous system and sense organs.

Mr. T. W. Surette and Prof. Clarke had charge of the department of music. The courses by Mr. Surette consisted of six lectures on pianoforte sonata, five lectures on church music, and three lectures on opera. He also conducted a solfeggio class of ten lectures. Prof. Clarke gave ten lectures on harmony, and ten on counterpoint. A lecture recital on Parsifal was given by Mr. Surette, which was illustrated by the piano and by stereopticon views, and a public concert was given at the Drexel institute under the direction of Prof. Clarke.

The department of science dealt principally with botany and chemistry. Dr. Schmucker, of the West Chester normal school, lectured on the life history of insects with particular reference to those injurious to vegetation, and Dr. Harshberger, of the University of Pennsylvania, on the natural history of field and garden plants. Prof. Wilson's subject was natural products; Prof. Halsted, of Rutgers college, treated of fungous diseases of plants. Dr. Robinson, of Harvard university, discussed the evolution and distribution of flowering plants. Dr. Macfarlane gave three lectures on our timber trees in health and in decay. In chemistry, Dr. M. E. Pennington lectured on the principles of chemistry; Prof. Atwater, of Wesleyan university, on the chemistry and economy of food and nutrition, in which he was assisted by Dr. Benedict of the same university. Prof. Frear, of the Pennsylvania State college, gave five lectures on the chemistry of the soils. Single lectures were delivered by Mrs. Lucy Langdon Williams Wilson on the proper correlation of nature studies, and Dr. Vickers Oberholtzer on the "Chemist as an Agent of Human Progress."

Prof. Schwatt, of the University of Pennsylvania, with his assistant, conducted through the whole course the classes in mathematics which this year evolved more than usual interest.

An excursion was made on the Schuylkill and Delaware rivers, visiting the main points of interest on the route, and another to Willow Grove, Philadelphia's pleasure resort.

Letters.

Editor of THE SCHOOL JOURNAL: A mistake was made in reporting my statement at the Kindergarten Conference, held in connection with the Clark University summer school, in regard to the age at which children should enter kindergarten? I said I preferred four to three years and that there were very few kindergartners to whom I would intrust a child of three. As this is a rather important point, I trust you will make suitable correction. Thanking you cordially for your recent kind words, I am,

Yours in the good cause,

New York, N. Y.

JENNY B. MERRILL.

Building Up Thought.

When Prof. S. H. Clark, of the Chicago university, was in Brooklyn last winter I attended his lectures on teaching reading. I had heard him before, so I knew something of his work, and, while I received new inspiration in the line of work he was advocating, it is not of that I want to write to-day.

He gave us a little pamphlet called "Mental Technique" that, in a measure, outlined and furnished illustration for his work. One of the points he made seemed to me a strong one. It was in effect that many students are incapable of continuity of thought. (None of us are likely to quarrel with him about that in other things than reading); they lose the thread of the sense before the conclusion of the sentence. Test—falling inflection where it ought not to come. They do not feel the urgency of throwing the eyes ahead—a falling voice means gradual relaxation of attention. The mind must be made sensitive to long sentences. Every sentence is a unit, and until you have all the details you haven't the unit.

Well, I tried some of this in reading, and, by the way, I found that demanding, "What is the main thought?" "What the subordinate?" "How will you express it with the voice?" etc., a great help in their analysis of sentences, and so a step in correlation.

Then it occurred to me, if this be helpful in reading, why not in the "dictation" in which we are floundering? Some way, "dictation" in spite of my efforts, had become rather perfunctory, mechanical work, and the results as a whole were not what I wished. So we made the experiment, and tried oral dictation for a while; for one thing it was a change; for another, they thought it as good as a game. We started with a short sentence, and "built up." I read the sentence, and called upon some one. If it was correctly repeated in every detail, I read another; if not, I continued to call until I did get it exactly. We really had great fun out of the work, and, I think, profit. I am quite sure I increased their power of retaining dictation more in that way than anything I tried. It showed to me most satisfactorily in their written work after a time of this oral drill.

If I give the list (as given by Prof. Clark) that I first made use of, it may tell the story quite as well as I can explain, and any one can readily see how such sentences may be varied and built up *ad infinitum*:

- (a) I see a cat.
- (b) I see a cat and a dog.
- (c) I see a large cat and a small dog.
- (d) I see a large gray cat and a small black dog.
- (e) I see a large gray Maltese cat and a small black-and-tan dog.
- (f) I see a large playful Maltese cat and a small frolicsome black-and-tan dog.
- (g) I see a large playful Maltese cat and a small frolicsome black-and-tan dog playing in the street.
- (h) I see a large playful Maltese cat and a small frolicsome black-and-tan dog playing in the middle of the widest street in the city of New York.
- (i) The principal of our public school saw a large gray playful Maltese cat and a small frolicsome black-and-tan dog playing in the middle of the widest street in the city of New York.
- (j) The principal of our public school and the secretary of the Western branch of the Society for the Prevention of Cruelty to Animals, saw a large playful Maltese cat and a small frolicsome black-and-tan dog playing in the middle of the widest street in the city of New York.
- (k) The kind hearted and intelligent principal of our public school and the benevolent and scholarly secretary of the enterprising Western branch of the Society for the Prevention of Cruelty to Animals saw a large playful Maltese cat and a small frolicsome black and tan dog playing, on a hot, sultry, summer afternoon in the month of August in the middle of the widest and busiest street of New York, where they seemed entirely oblivious to the amusement they were affording to a large crowd of spectators viewing their sport from the sidewalks, and the windows and doorways of the surrounding warehouses.

Brooklyn.

CAROLINE MARTIN.

The Colorado Canon.

The Santa Fé railroad left me at Flagstaff, a typical Western town; lumbering, mining, and stock-raising all flourish, and whiskey drinking too.

Probably one-half of the main street was given up to saloons, side by side, no blinds nor screens; faro, keno, and poker games in

full blast. The costumes here are well exemplified by Remington's sketches, the high pointed Mexican sombrero, loaded with silver lace and tied under the chin, high heeled boots with huge spurs.

The air here is exhilarating, as the town is at an altitude of 7000 feet; the pine forests around add their perfume; the soil is a bright red; the sky has a deep velvety hue known as "Arizona turquoise;" the background of snow-covered mountains (the San Francisco range) adds to the strange impressions that crowd on one here.

We left for the cañon at 7 A. M., in a four-seated wagon drawn by four horses; the first stage is seventeen miles and there new horses were put on; and then we drove eighteen miles and changed again; the next stage was twenty, the next sixteen miles. The first, second, and fourth stages were through magnificent pine forests; the third, through a desert of hard lava. There was no sign of human beings after the first twelve miles; no water except at the stage stations and then it was hauled ten miles in one case and twenty in another; hay is drawn from Flagstaff—the railroad. The sun brings the thermometer up at noon in the shade to 140 degrees, but the air is so dry and light that one does not feel oppressed. At Cedar where we landed there is a petrified forest.

We reached the camp on the edge or rim of the cañon at 7 o'clock—it is merely a little village of tents under pine trees. We climbed out and ascended a hill a hundred yards and there was indeed a wonderful sight. Those who have looked down into the cañon or gorge below the falls of Niagara think they have seen something, but the sight of the Colorado cañon surpasses that a thousand fold; there is no way to describe it; language fails. It produces a shock; some see it once and feel too deeply; it affects some as it would to go up blindfold two miles in a balloon and then uncover the eyes and look down.

The next morning we started to go down into the cañon—it is a trip nine miles long and is made on horses. Captain John Hance is the manager and we reached the river at noon; what seemed to be a narrow ribbon of water from the rim of the cañon turns out to be a great roaring rushing river. We found ourselves in a narrow space with the river in front and many colored walls towering up in the air, the tops fringed by pine trees. We spent the day at Hance's camp, and then crossed the river and went down some thirty miles, recrossed and then made our way to the camp on the rim. The air here is wonderfully clear; the peak of the San Francisco mountains seems to be twenty miles away; it is in fact eighty. It is remarkable that so few Americans visit this wonder; most of those who come are German, French, and English; they consider it the wonder of the world.

M. L. TOWNSEND.

The Boy.

When you hear a fearful rattle,
Like a miniature cyclone,
With some sounds so strange that surely
Their like was never known,
While the mother listens calmly,
Even with a smiling face,
You may know that it is nothing,
But the boy about the place.

When there's famine in the cupboard
And the milk pail soon runs dry,
And you can't keep pies or cookies,
No matter how you try;
When you vainly seek for apples
That have gone and left no trace,
No, hard times is not the trouble—
There's a boy about the place.

When there's sawdust on the carpet
And some shavings on the beds,
When the rugs are tossed in corners
And your chairs stand on their heads,
While, if a tool you're needing, you
All round the house must race,
You may know he's making something,
Is the boy about the place.

When the house is full of sunshine
On the darkest kind of day,
And you have to laugh at seeing
Some outlandish boyish play,
And when eyes so bright and loving
Oft are raised to meet your face,
You will pray, I know, "God bless him,
Bless our boy about the place."

--Pacific Coast Endeavorer.

Books.

J. Wm. Jones, D. D., former chaplain in the army of Northern Virginia and now chaplain of the United Confederate Veterans, has written a *School History of the United States*, the advance proof of which has just been received. The points wherein this history differs from other histories is in the fuller treatment of the settlement and development of the Southern colonies; of Southern events, especially during the Civil war, which is called the war for Southern independence, and the biographies of Southern men. There has been complaint in the South that histories written by Northern men have been biased. This is certainly true of a great many of them. Very few men can write history impartially. While the history of Mr. Jones has a Southern bias, it is not so strong as to be offensive. So far as the statements of facts is concerned the book is remarkably accurate, and the author's attitude toward the Union is patriotic. The bitter memories of the war are nearly gone, and we can now look upon the struggle calmly as a great event in history. We see no reason why this book should not be read, along with other histories, in Northern schools to show how Southern men view the war and its outcome. We are all living harmoniously under one government now and should try to understand each other, and no harm can come from beginning early. The teacher will be greatly assisted by the questions at the end of the chapters. One noticeable feature of the book is the constitution of the United States and of the Confederate States in parallel columns, with the additions and changes made in the latter in italics. The type is large and clear and the side heads prominent. The book is well illustrated with maps, etc. (R. H. Woodward Co., Baltimore.)

Studies in Structure and Style, by W. T. Brewster, A. M., tutor in rhetoric in Columbia university, is intended to supplement the study of the principles of rhetoric by a systematic analysis of several pieces of modern English prose. These are Froude's "Defeat of the Spanish Armada," Stevenson's "Personal Experience and Review," John Morley's "Macaulay," Matthew Arnold's "Study of Celtic Literature," Bryce's "Strength of American Democracy," Ruskin's "Crown of Wild Olives," and Newman's "What is a University?" These essays are well annotated, whatever is necessary for the clear understanding of the text being placed at the bottom of the page. The notes on structure, which are far more important, have been treated with great fulness. The book has an introduction by G. R. Carpenter, A. B., professor of rhetoric and English composition in Columbia university. (Macmillan Co., New York. \$1.10.)

A theoretical and practical treatise on *The Art of Reading and Speaking*, containing much sound direction and advice to those who aim to excel in this art is the work of James Fleming, B. B., vicar of St. Michael's, Chester Square, chaplain-in-ordinary to the queen. The author has seized upon the essentials of the

art and made them prominent; these include the voice, articulation and pronunciation, management of the breath, emphasis, pause, delivery, accent, pathos, expression, gesture, and other topics. A few examples are given to illustrate his meaning. In the appendix are copious extracts from Shakespeare's plays for practice in reading. (Edward Arnold, New York.)

There is very little excuse for ignorance in this age and country when schools are so numerous, books and papers so abundant, and institutions like the Chautauqua system of instruction bring the college right to one's door. Every year the books of the Chautauqua course are looked forward to with increased interest. The one who follows up the course for a number of years will get what may be termed a liberal education. They are written by those who are leaders in their respective fields of research. The year 1896-7 is the French year, and hence a large part of the effort will be directed to the study of that wonderful nation. In addition to the excellent magazine known as the *Chautauquan*, there are five books intended for the use of students. One of these is *The Growth of the French Nation*, by Prof. George B. Adams, of Yale university. This book traces the gradual consolidation and evolution of the French people from the scattered elements of the feudal system into the centralized and unified nation of to-day. The maps and illustrations add to the beauty and value of the book. *French Traits*, by W. C. Brownell, will aid greatly in understanding the French people. The author resided in France for several years and had ample opportunity for studying the people from every side, and the book is as charming for the attractiveness of the style as for the interest of the matter. In *A Study of the Sky*, Prof. Herbert A. Howe, of Chamberlain observatory, has given an insight into the wonders of modern astronomy, including descriptions of the great observatories. The book is popular in style and is liberally illustrated. The diagrams showing the location of the principal stars in the constellations are particularly noticeable. Prof. J. P. Mahaffy, of Trinity college, Dublin, contributes to the series *A Survey of Greek Civilization*, in which he gives a clear and interesting picture of the literature, social life, and educational methods of this gifted people. *A History of Greek Art*, by Prof. Frank B. Tarbell, of the University of Chicago, is a popular treatment of this important subject. With the aid of 200 reproductions of Greek architecture, sculpture, and painting, he gives a clear and comprehensive outline of the expression which Greek genius found in various artistic forms. (Flood and Vincent, Meadville, Pa. 12mo., cloth, each volume, \$1.00.)

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Literary Notes.

A great many men bore a part in the consolidation of the German empire, but it was Bismarck who was the master mind through all, inspiring the timid, restraining the rash, and molding events up to the crowning of King William in Versailles in 1871. It is hard for Americans to realize the commanding influence exercised by him. As a masterful man, a man of resources, history has probably never seen his superior. *Prince Bismarck* as a student, parliamentarian, ambassador, and chancellor is depicted in a small volume by Charles Lowe, M. A. The author has well set forth the causes and results of the wars with Denmark, Austria, and France and given much inside diplomatic history. Historical students will find the book profitable reading. (Roberts Brothers, Boston. \$1.25.)

No man in England ever had a larger and more interesting political career than William E. Gladstone, whose story is briefly told by Henry E. Lucy in a small volume. The history of Gladstone's life is to a large extent the history of England for the past fifty or sixty years. During that time changes have been made largely through Mr. Gladstone's instrumentality, by which old abuses have been abolished and England's prosperity largely increased. The many exciting parliamentary struggles in which Gladstone has engaged are as well described as space would permit. (Roberts Brothers, Boston. \$1.25.)

Hampton Roads and Thereabouts is a small pamphlet describing the attractions of that delightful region. It is handsomely printed and illustrated in black and red. The Old Dominion Steamship Co., publishes it.

Under the caption of "Issues and Prospects of the Campaign," the *North American Review* for August presents two extremely able articles dealing directly with the vital political questions of the day, the Republican party's presentation of its claims being set forth by the Hon. W. E. Chandler, U. S. Senator from New Hampshire, and the Democratic by the Hon. Josiah Quincy, present mayor of the city of Boston.

Of his friend H. C. Bunner, Brander Matthews says in the September *Scribner's*: "To say that Bunner was wholly free from

any taint of Anglomaniism is to state the case mildly; his Americanism was as sturdy as Lowell's. He was firmly rooted in the soil of his nativity. He was glad that he was an American and proud of being a New Yorker. He saw that creatures of the type that Lowell scorned still lingered on; and if he were intolerant toward any one it was toward the renegade American, the man without a country."

The publishers of the old standard eclectic weekly, *Littell's Living Age*, founded by E. Littell in 1844, are about to introduce several new and valuable features in their magazine. The most important of these is a monthly supplement, given without additional cost to the subscribers, which will contain readings from American magazines, readings from new books, and also a list of books of the month. It is also proposed to extend this field by giving occasional translations of noteworthy articles from the French, German, Spanish, and Italian reviews and magazines.

Mr. Booker T. Washington, the colored founder and president of Tuskegee institute in Alabama, has more clearly worked out a system of education that is adapted to Southern conditions than any other man who has attacked the problem. His special work of course is the application of this system to the requirements of his own race; but it is no less applicable to the conditions of both races in the South. How he came to work out the system that is in such successful operation at Tuskegee, Mr. Washington tells in an article in the September *Atlantic Monthly*, in which he explains more fully than he has before explained the philosophic and economic basis of the Tuskegee system.

Primitive Buddhism: its Origin and Teachings, is the title of a new book by Mrs. Elizabeth A. Reed. The recently awakened interest in the philosophies of the East and especially in the subject of Buddhism, will find a fresh impetus in the announcement of this work; it claims to present, in as brief a manner as is consistent with accuracy, the authoritative teachings of primitive Buddhism as found in the Sacred Books of the East, the official documents of the early Buddhists, and elsewhere. The book is to be published by Scott, Foresman & Co., of Chicago.

Greenough's New Virgil was edited with special reference to poetry and *belles lettres*. In a similar way Allen and Greenough's *New Cicero* (Ginn & Co.), while primarily edited as a Latin classic to be read in secondary schools, has been treated with special reference to the use of the orations as models of classic oratory. There are careful analytic headings, and frequently the notes call attention to the development and significance of effective points.

Scott, Foresman & Co., announce the early issue of new and sumptuous holiday editions of Benjamin F. Taylor's "Songs of Yesterday" and Dr. Wm. Mathews' "Getting on in the World."

"A Russian medical man, Dr. Kotz, has noticed," says *The Electrical Review*, June 3, quoting an unnamed foreign exchange, that when a light fatigues the eye, the eye seeks repose in a wink, and that the more tiresome the light is the more frequent is the winking. Therefore he set to to compare the tiredness of different lights by counting the winks; and he found that with a candle the eye winked 6.8 times a minute, with town gas 2.8 times, with daylight 2.2 times, and with electric light 1.8 times a minute. Why not a nod? A nod is as good as a wink."

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Interesting Notes.

The report of the Interstate Commerce Commission for the year ended June 30, 1895 is just made public and shows 180,657.47 miles of track in the United States, or 236,894.26 miles, adding in sidings, switches, second tracks, etc., enough to run ten tracks almost around the earth, or one track to the moon and have 15 miles to spare for switches. The increase of track during the year was a little less than 2,000 miles. On these tracks there were 35,699 locomotives and 1,170,561 cars, which carried 696,761,171 tons of freight during the year, an increase of 58,874,618 tons over the preceding year. There were 1,965 railway corporations, employing 785,034 employees, with capital placed at \$10,985,203,125, or \$63,330 per mile. Of the railway stock 70 per cent. paid no dividend, and on the funded debt (bonds) nearly 17 per cent. paid no interest. The gross earnings were \$1,075,371,462, and the cost of operation was \$725,720,415. The number of passengers carried was 507,421,362, equal to nearly \$1,400,000 a day; that is, every 50 days the railroads carry passengers equal in number to the entire population of the country.

In Canada there is a wide-spread feeling of relief as a result of the election, and renewed hope of quickened progress in the near future. Pressing matters of domestic policy will be vigorously grappled with by the new government. The settlement of the great Northwest, which has been long retarded by railway monopoly and a bad land policy, will receive all possible attention and encouragement. The recent discovery of incomparably rich gold deposits in British Columbia, and the vast quantities of nickel ore in Ontario, offer a lucrative field to the capitalist; and the general mineral resources of the country will, it is believed, gain an impetus from the change of industrial policy. Increased wealth and population are the core of Canada's most exigent needs; the framework of government and institutions is strong, but has for some time comparatively lacked the vitalizing movement of business enterprise. Protection, having been tried and found wanting, will gradually but surely be eliminated from the list of contentious questions. Other matters, whose importance has been quite overshadowed by the two main issues, will likely engage the attention of the government; such as improved and enlarged canals, perfecting water communication between the head of Lake Superior and the Atlantic seaboard, a new fast ocean mail service, and the relation of Newfoundland to confederation. This is by no means a complete enumeration of the problems of progress which press for solution at a time of urgency, but also a time of hope.—*North American Review*.

Louisiana has decided to make January 19, General Robert E. Lee's birthday, a public holiday. The idea of observing a special day in commemoration or memento of the Southern Confederacy was proposed only a few years ago, but it has met with universal favor through the South. A convention of Confederate veterans suggested June 3 as a proper holiday, it being the birthday of "President" Jefferson Davis, the head and front of "the lost cause." But the people seem to take a different view of the matter, and to have selected a different hero. Only one state, Fla., has accepted the suggestion of the veterans and made June 3 "Confederate day," while Louisiana is the fifth to select Lee's birthday instead; and this selection is the more marked because Jefferson Davis was well-known in New Orleans, was a frequent resident here,

and his permanent home, Beauvoir, is practically a suburb of the city. Louisiana's action has probably settled the matter, and "Confederate day" will commemorate Lee instead of Davis as the ideal Southern hero.—*Harper's Weekly*.

The action of trades' unions on both sides of the Atlantic is more than a new expression of an old demand. It expresses what is largely a new demand. The interest of nearly all men engaged in industry has long been opposed to war. Capital is wasted at an appalling rate by the modern method of fighting, and this waste reduces the wage-paying capacity of employers. War, as it were, sterilizes the earth. The workingman finds himself in a less fruitful environment, because of the reduction in the outfit of working appliances that war occasions. You cannot beat the pruning-hooks of the world into swords and still gather as much wheat as before. Wealth-creating power shrinks and wages fall by reason of such wastes. Debts that have to be paid by indirect taxation press disproportionately on workingmen. It is always laborers more than others who have to face muskets; they are the rank and file of armies. Even if they keep out of the field they suffer by inflated prices. Goods are dear in time of war; measured in commodities, wages in America were at their lowest in 1865.—*Century*.

The United States man-of-war *Raleigh* which slipped up to New Orleans a few days ago, gave the city a surprise with its search-light, one of the most powerful in the navy, and greatly puzzled and disturbed those who did not go to the Chicago Exposition or failed to see the search-lights there. A number of "back-of-town" residents brought in, the first night, sensational reports of a very peculiar and brilliant light which they had observed in various places, even on the prairies and swamps around the city. Mr. Pickwick's scientific old gentleman who discovered the meteor at Bristol was not half as much surprised as hundreds of Orleanians at this altogether unexpected electric light.—*Harper's Weekly*.

"It was my good fortune," says Mrs. Fields in the August *Atlantic*, "to be once in Rome with Mrs. Stowe, when she came unexpectedly face to face with an exhibition of the general feeling of reverence and gratitude towards herself. We had gone to the room of the Brothers Castellani, the workers in gold. Mrs. Stowe was full of enthusiasm, and we lingered long over the things which the brothers brought forward to show. Among them was the head of an Egyptian slave carved in black onyx. While we were enjoying it, one of the brothers said to Mrs. Stowe, 'Madam, we know what you have been to the poor slave. We are ourselves but poor slaves still in Italy—you feel for us will you keep this—gem as a slight recognition of what you have done?' She took the jewel in silence, but her eyes were filled with tears, and it was impossible for her to speak."

Recalled Stormy Times.

"Well, that looks natural," said the old soldier, looking at a can of condensed milk on the breakfast table in place of ordinary milk that failed on account of the storm. "It's the Gail Borden Eagle Brand we used during the war."

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The death of Joseph Alfred Novello, at Genoa, recently, calls attention to a man who has done more than any one else to foster sound musical taste in England and America. Born in London, of an English-Italian family, famed for a century for musical ability, it was Joseph Alfred who first had printed the musical scores of the great masters, which were publications not alone excellent as to style, but were to be had at reasonable prices. Vincent Novello, Joseph's father, began as a music publisher in London as far back as 1811. The business took a much larger scope when, in 1846, Joseph Alfred printed from type the works of Handel, Haydn, Bach, Mozart, and others. He was thus enabled to lower very much the price of music, and so extend the demand. It is positive that such admiration as exists in the United States and England for Bach is due to the wide circulation Bach obtained through the Novello press. Perhaps, too, if not for Novello, Mendelssohn would never have been so generally accessible. With Mendelssohn, Novello was on intimate terms, as were his sisters, Cecelia and Clara Anastasia, both vocalists of distinction. In England Novello was well known, apart from his business, as one who had fought the hardest against the taxation of knowledge. Retiring from business in 1856, Mr. Novello established himself in Italy, and was at the head of the Italian Irrigation Company. He enjoyed the friendship of many distinguished English and Italian statesmen, and he died at the ripe age of eighty-six.—*Harper's Weekly*.

Old Roman and Greek coins are found in large quantities every year in tombs and in the ruins of old houses. Messrs. Hunt and Grenfell found two large jars of Roman silver and gold coins in Lower Egypt last winter in which were over 4,000 coins in perfect preservation. The latest coins were those of Hadrian (A. D. 138) and Marcus Aurelius (A. D. 161). All over Europe, Asia, and Africa similar finds are frequent. In June, 1833, some boys found a box containing 7,000 coins, which were mostly English, of the reign of William the Conqueror (A. D. 1066) and William Rufus (A. D. 1109). In 1832 the sexton of Hexham church, while digging a grave, found a brass bucket containing over 8,000 coins of the early Saxon kings of England (about A. D. 800). In High Wycombe a shepherd boy found a large number of British gold coins which had been hidden over 1800 years. In 1831 a chest containing over 200,000 coins of Edward I. and II. (about A. D. 1300) was unearthed at Tutbury, and not far from this find another box was dug up containing over 7,000 gold and silver coins, mostly Saxon (about A. D. 850), but containing many foreign coins. It was probably the entire stock of some money-broker who was obliged to flee for his life.—*Harper's Round Table*.

The Deformed Transformed.

Here is an interesting description of how a homely young woman was transformed into a good looking young lady by means of dermatological skill. The illustrations in themselves tell an absolutely truthful story because they were reproduced from photographs. The young lady's name is not published for obvious reasons. She had an



exaggerated Roman nose and a large fleshy mole on the right cheek. The bridge of her nose projected in such an aggressive manner as to give more than the severity of aspect of the typical Roman. In fact she looked forbidding, and this to a young woman of the most amiable and sociable intentions was painful in the extreme. The fleshy mole added considerably to her forbidding air. Disgusted and despairing, she was beginning to resign herself to her unenviable lot, when her attention was called to John H. Woodbury who devotes himself to facial surgery. To him she went for help and found it.

The operations, she says, were painless, chiefly owing to the use of cocaine. When she stepped into the operating chair the first thing was to make a large hypodermic injection of cocaine into her nose. An incision was then made along the bridge of the nose and the skin laid back so as to expose as much cartilage and bone as it was intended to remove. Two small steel hooks were inserted in the opposing edges of the wound where the cut was made. By means of these the skin was held back. A portion of the cartilage was then cut away with a knife and the electric burr was brought into service to remove a piece of the bone. The electric burr is a small drilling instrument and is used by dentists in excavating teeth. A sufficient amount of bone was cut away to give the nose a nearly straight line when the severed skin was brought together again. The piece of cartilage and bone removed was wedge-shaped.

After the superfluous substance had been removed the edges of the wound were brought together and held by a new kind of adhesive plaster. Until recently fine silk thread was used to sew the skin together, but the plaster leaves less of a scar, and is in other ways superior. The patient was in the chair only half an hour. The wound was bandaged as well as plastered. The removal of the mole was a very simple operation, and one that is already familiar. It was destroyed by electricity. At the end of a week the bandage and the plaster were removed from the young woman's nose. All the trace of the operation to be seen was a thin red line and this disappeared two weeks after. Mr. Woodbury's institute is at 127 W. 42d street, New York.

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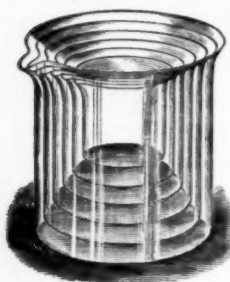
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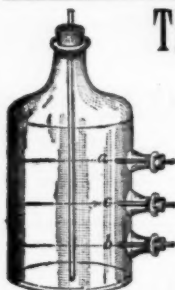


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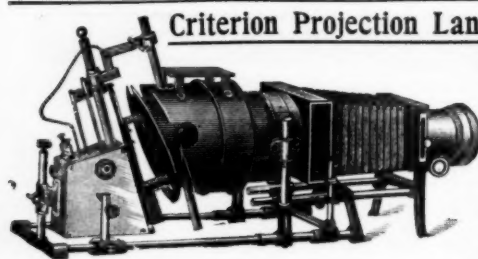
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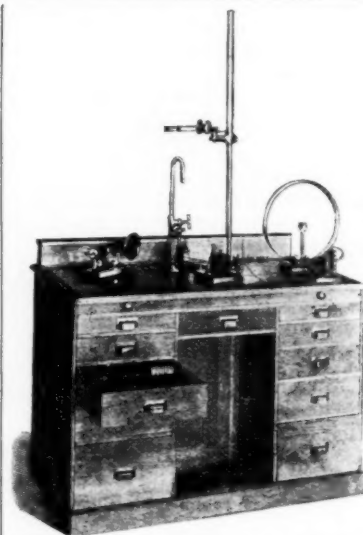
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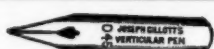
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